

## Finding the capacity

**W**e have recently been commissioned by the DETR to undertake research into urban housing capacity. This follows our report for Friends of the Earth which explored the potential to accommodate 75% of new housing in urban areas (SUN Dial 7).

The revised PPG 3 is likely to require local authorities to assess the housing capacity of their urban areas. We are looking at the capacity assessments that have been done to draw out best-practice.

It is clear that this is a subject which is currently exercising local authorities, many of whom are undertaking some form of assessment in addition to their work for the National Land Use Database. It is however clear that the methodologies used vary hugely which has implications for the ability to compare figures from different areas.

Details of this work will be carried in a future issue of SUN Dial. However we would welcome details of Urban Capacity assessments that have been undertaken to ensure that our list is as comprehensive as possible.



A design exercise by Llewellyn Davies as part of the Sustainable Residential Quality research which looked at the capacity of London's town centres for LPAC.

# the Sustainable URBAN NEIGHBOURHOOD

The **Sustainable Urban Neighbourhood Initiative** will have achieved little if it concentrates on utopian models for urban development. Much more important are the anti-urban trends that currently dominate the development industry and the public attitudes behind these trends. In this issue we therefore review our recent work with MORI for the Urban Task Force looking at attitudes to urban living. Joe Ravetz also describes how policies to promote the sustainability of the city region impact on the neighbourhood and can reverse these very same trends to create a positive cycle of reurbanisation.

There is no one physical model which responds to these challenges as illustrated by the variety of schemes described inside. From Libeskind's extension to Berlin and waterfront development to the Ideal Home Show's slim house and an urban village in Lincoln.



## Initiative

Welcome to the SEVENTH issue of **SUN DIAL**, the journal of the Sustainable Urban Neighbourhood Initiative

The ideas that seemed radical three years ago when the SUN Initiative started are now being accepted with remarkable speed. 1998 has been a good year and our report for Friends of the Earth on urban housing capacity has put us at the centre of the policy debate. The year ends with the publication of the SUN Book by the Architectural Press and funding from the BRE and the European Union's ALTENER Fund. Details of the developments along with articles on green housing, LETS systems and urban attitudes can be found inside.

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**Rediscovering the Waterfront:** In 1979 and 1989 URBED undertook surveys of waterfront development in the UK. It therefore seemed only right in 1999 that we should do the same. The result is the 'Urban Waterfront' research project which will give a unique insight into 30 years of waterfront development in the UK. **Nicholas Falk** and **Kieran Yates** review work in progress.

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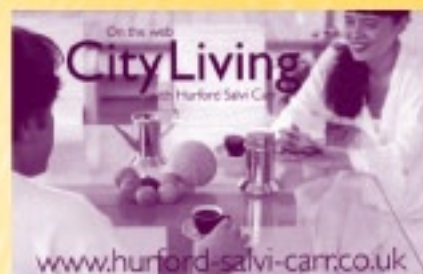
**Long Leys: a village in the city:** The local plan for Lincoln identifies two urban villages. The smaller of the two involves the redevelopment of a hospital. **David Rudlin** describes the development of a brief for the site which explores a gentler form of urbanism.

# But would you live there?

## Shaping attitudes to urban living



In SUN Dial 7 we described some work commissioned by the Urban Task Force to research attitudes to urban living. The findings were published in February 1999. David Rudlin, the report's author outlines the main findings



Urban housing is sold not so much as a dwelling or even a location but as a lifestyle choice.

**B**ritain, we are told, is on the verge of an Urban renaissance. But are the British public willing participants in this great enterprise? With the work of the Urban Task Force nearing completion and the promise of an urban white paper to follow there is a great deal of talk of urban living and cosmopolitan lifestyles, yet surveys of residential attitudes of British people suggest that they are as wedded to their suburban home as they ever were.

The urban renaissance will not happen if people have to be dragged kicking and screaming back into the towns and cities that they have been abandoning for years. If the British public really cannot be 'sold' the idea that they could live in urban areas they will not do so and developers, for want of a market, will not build there. One of the Task Force's concerns is therefore how people's attitudes to urban areas might, if not be shaped, then at least be influenced. The research therefore sought to explore these issues through citizens' workshops in Manchester, Bristol and London.

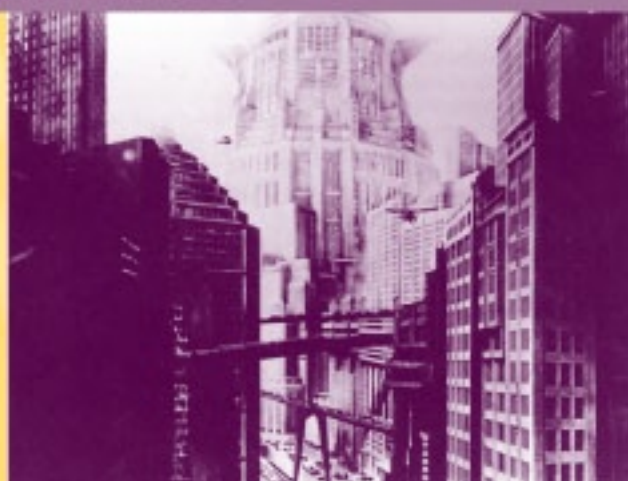
While a great deal has been written about attitudes to urban areas, very little work has been done to research how these views are shaped. Our work therefore started by reviewing related fields like tourism, housing sales and place marketing - such as the Glasgow *Smiles Better* campaign. These were contrasted to other sources of

information on urban areas such as the news media, advertising and popular culture. It is extraordinary how diverse the images of the city projected by these different media can be. While the local news may be filled with stories of urban problems the commercial breaks are littered with images of bright young urbanites enjoying city life.

The developers who have successfully marketed urban housing have made good use of these advertising images. What they have been selling is not so much a dwelling or even a location but a lifestyle. The buyer is pictured as someone with taste who wants to set themselves apart from the 'herd' as represented by suburbia. Such messages are effective, even in run-down areas, because of the way that people create 'scripts' to reconcile their conflicting

If the British public really cannot be 'sold' the idea that they could live in urban areas they will not do so and developers, for want of a market, will not build there

impressions of the city. So, for example, Bristol can be marketed to young people as an exciting clubbing centre and to an older group as a cosy provincial city while in the local paper it appears besieged by crime. Each view is true in its way and matches the experience of (or script created by) different groups. One of the aims of the research was therefore to explore the impact of these different sources of information on attitudes to urban areas.







### Urban settlers

The aim of the workshops was to explore the attitudes of people who might be persuaded to move into urban areas. We therefore excluded people already living in city centre apartments because they were already converted. We also excluded families with young children, not because we felt that cities were inappropriate for them, but because they were felt to be unpersuadable at present. This led to the idea of urban repopulation taking place in waves. The first people to move into urban areas were characterised as *urban pioneers* who enjoy the excitement of urban life. We however were more interested in the waves that follow these pioneers who we characterised as *urban settlers*. It seemed to us that the attitudes of these settlers could be quite different to the pioneers and the workshops were therefore designed to explore their views. The workshop participants were therefore made up of childless households. We did however ensure a mix of ages, sexes and social groups. The recruitment process also ensured a mix of people currently living in urban and suburban districts and of these who described themselves as cityphiles and cityphobes.

### Balancing priorities

Given the anti-urban tenor of much attitudinal research, it came as a surprise to us how positive the workshop participants were

about urban areas even those who described themselves as cityphobes. However the discussions revealed a range of tensions in their views. They liked access to shops and facilities but disliked the noise and congestion that this often implied. They liked the peace and quiet of suburban areas but regarded them as dead and boring. The ideal location seemed to be a local centre with a village atmosphere and a range of facilities. This included districts like Clapham in London, Chorlton in Manchester or Clifton in Bristol. They also wanted access to the countryside and greenery but also to be able to walk into the city or at least to local facilities. This was seen as a particular strength of Bristol and highlighted a strong preference for compact or concentrated centres. With only a couple of exceptions they relished the diversity of urban areas which is in contrast to most surveys of suburban housebuyers. As one participant said *'I have an Asian family on one side, I have some hippies on the other and I wouldn't swap them for the world!'*

In deciding where to live people therefore appear to be weighing up what could be called urban and suburban aspirations. Those living in suburban areas relished the peace and quiet, space and greenery but missed the diversity, convenience and excitement of urban life while the opposite was true of people living in urban areas. While both groups felt that they had struck the best possible balance between these different aspirations it did not seem take much to tip the balance one way or another.

**The ideal location seemed to be a local centre with a village atmosphere and a range of facilities**

### Key Themes

Based upon the discussions at the workshops we drew out five key themes in our report to the Task Force:-

**The lack of a shared language:** The first was that people can have very different understandings of words like 'urban', 'suburban', 'city' and 'inner city'. The word 'urban' to some people meant factories and smog while to others it was everything that was not rural. Indeed to Londoners urban meant outlining suburban centres.

However despite the pro-urban

tenor of the discussion, people very rarely used the word 'urban' in a positive sense, being more likely to use the word 'city'. The exceptions to this were the positive connotations of 'urban lifestyles' and the negative view of the 'inner city'. We concluded that attitudinal research on views about different types of area needed to be treated with caution. This issue also has implications for the language used to promote urban areas.

**Generic views and real places:** It was also clear that people hold strong generic views of urban and suburban areas which can be very different to the views that they

have of places that they know. Generic views of suburbs, for the young at least, seemed to be tied up with their views of their parents' generation. The generic views of urban areas, by contrast are much more based on media images, both positive and negative. However we found that people's generic views are quite easily overridden by their experience of real places, even if that experience was just looking at a photograph. We concluded that real examples of urban areas which had changed were probably more powerful than the most sumptuous images of idealised urban areas in changing attitudes.

**The sophisticated consumer:** It was also clear that people are able to spot when they are being sold something and tend to distrust the information that they are given as a result. The most reliable source of information about urban areas was seen as friends and relatives. Television news and local papers were trusted to tell the truth even though the picture painted was felt to be exaggerated. Television programmes like 'Friends' were seen as pure fantasy but were so attractive that people did not really care and therefore responded well to publicity material which tapped into these images. Further down the scale came estate agents and other developers who were trusted to the extent that you at least knew what they were selling. The least trustworthy of all were councils and public agencies who were regarded in a surprisingly poor light.

**Open to argument:** It was clear that people could be persuaded to live in urban areas. While attitudinal research may show a preference for suburban environments our work suggested that this preference is

the result of quite a subtle balance of what might be called suburban and urban aspirations. While the balance may have been tipped in favour of the suburb for many years we believe that it is possible to tap into people's urban aspirations to tip the balance of individual decisions more firmly in favour of urban areas.

**An aversion to risk:** If this is to happen it is important to understand that the *urban settlers*, as we have called them, have different aspirations to the *urban pioneers* who preceded them. The most important difference is that the *urban settlers* are risk-averse. They are not attracted by the excitement of urban living nor by contemporary design. Rather they want to be assured that urban areas are safe places for them to live and to own a home.

**Despite a century of decline, there remains - or at least has been rekindled - a desire for urban living in the hearts of many British people**

### Conclusions

Because population has been drifting away from the urban areas of Britain for more than a century there is a tendency to believe that this movement is inevitable. Our research suggested that it is not. Throughout the twentieth century Britain's urban exodus has been driven by lifestyle aspirations which have prioritised suburban environments. As urban areas have lost population and investment they have declined and the problems of decline have caused more people to leave creating a vicious circle of depopulation.

The challenge facing the Urban Task Force and the Government is to break this cycle of decline. The findings of our research give some cause for optimism that this is possible. Despite a century of decline, there remains - or at least has been rekindled - a desire for urban living in the hearts of many British people. Many people have returned to live in urban areas and our work suggests there are many more who could be persuaded to follow.

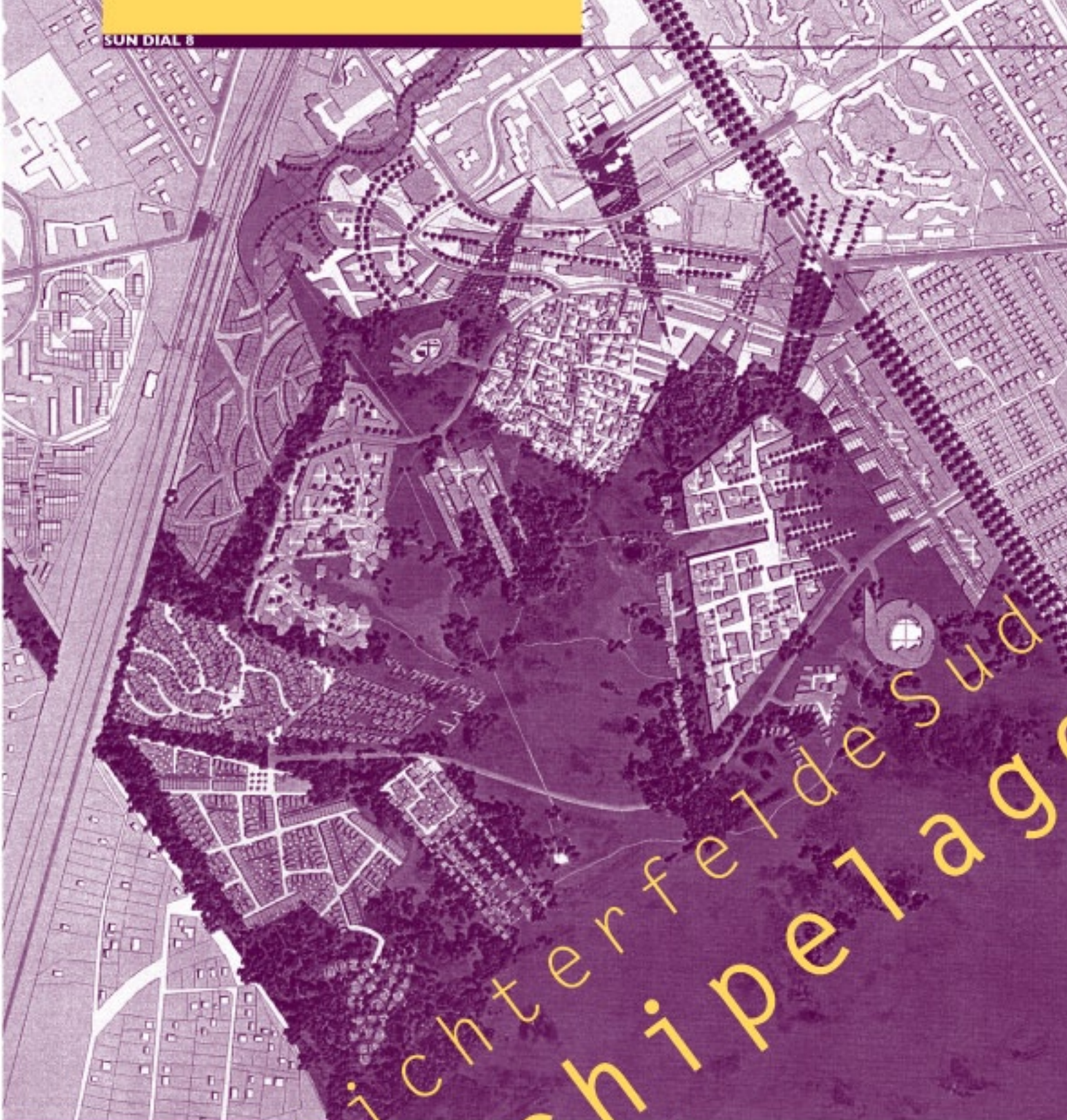
The research was undertaken by MORI working with URBED and the School for Policy Studies at the University of Bristol. It was commissioned by the Urban Task Force in association with the DETR and published in February 1999.

Copies of the report can be obtained from the Department of the Environment, Transport and Regions, DETR Free Literature, PO Box 236, Wellesley, LS23 7NB. Telephone 0870 1226 236



People valued the diversity of urban life such as New York's China Town (above). Their ideal seemed to be a compact urban centre or village within a large city like Clapham, Clifton or Chorlton (illustration Moseley Village in Birmingham).





When the Libeskind consortium was shortlisted for the Allerton Bywater Millennium Village competition many people were surprised at their involvement in the planning of a new village. However through their work in Berlin, Studio Libeskind are exploring a new language of residential design. In this article **Daniel Libeskind** describes their scheme for an extension to Berlin at Lichterfelde Sud

**L**ichterfelde Sud on the outskirts of Berlin is dominated by a harsh transition between Berlin's urban structure and Brandenburg's open landscape. Developing this very special urban housing scheme in response demanded progressive design planning and a flexible framework in line with the dynamics of city planning, so as not to be overrun by future developments.

The diversity and ever-changing nature of urban living requires the development of new patterns of thought to facilitate a far reaching modern debate, taking into account such themes as the form of the family, the emancipatory need for mobility, as well as other factors. This is a prerequisite for an understandable and readable vision of the city. A city which does not make allowances for this growth loses its capacity for effective communication and competitiveness, and inevitably loses its life force.

The exceptional location of the planning area puts forth questions and problems which serve to emphasise, on the one hand the relationship of structures to each other, and on the other the city boundary to its surroundings, requiring a new and adequate long term typology of responses.

Inspired by the Genius Loci of urban structure and landscape, the design team developed an urban planning concept which blends with the existing landscape symbiotically, to create a

completely new form of city outskirts. The image of an 'Archipelago' presents a new opportunity in the current discussion on city boundaries. A collection of heterogeneous islands disperse from the outskirts of the city towards the countryside, penetrated by the 'sea' of the Brandenburg landscape.

#### Orientation Points

The energy forces arising from this are marked by three generic points of orientation. The railway station 'Gateway', the 'Emblem' and the 'Tornado' spread out to form an area, not only in the immediate vicinity of the existing city outskirts, but also integrated within the overall structure of Berlin. These three 'points of navigation' create a network of vectors and entrances, resulting in a gateway from Berlin to the planning area of Lichterfelde Sud. Like icons, they are easily recognisable landmarks to the passing motorists, train commuters, cyclists and pedestrians alike:

- The 'Emblem', a green wedge, opens up a view of the Archipelago's attractive landscape to passing travellers. A gateway to the Archipelago and Berlin is thus created in Osdorfer Straße. The Emblem is defined by the generic connection between green and urbanity.
- The 'Gateway', an ensemble of various horizontal and vertical levels and directions in the railway station square, represents an unmistakable association between urban infrastructure and landscape for those arriving to and departing from the area.

- The 'Tornado' gives the impression of living on a vertical island, and can be seen directly from three different directions. A vertical composition, it embodies a magnet for the vectors.

The collection of views between these three orientation points unite the island world of the archipelago and create a connection with the neighbouring city areas. The integration of the *thermometer* housing project connects to the areas west of the railway through the gateway and the station square which houses two higher buildings, as well as the arch of the green wedge into the district around the Woltmannsweg across Ostfelder Straße and beyond, integrating quite naturally the Archipelago's outskirts into the structure of Berlin as a whole. The *Tornado* fulfills its full potential when seen from a distance and marks a new entry to the city.

Every part of the area is integrated by the composition of the three elements, through which a generic self-sufficient structure arises.

In each of the three building phases this structure transfers its power of orientation and integration onto the various characteristics of the individual islands.

It ensures quality and creates the possibility for the small and varying quarters to be home to diverse lifestyles.

The Archipelago composition and its formation in the vicinity of the countryside allows future residents the opportunity of experiencing the constant exchange between open landscapes and the complex nature of urbanity.

The individual islands of development can be adapted, appropriate to their location and requirements, to fit the city's changing needs. Various architectural expressions and a varied choice of buildings satisfy differing social individual needs, strengthening the area as an urban form. This also provides space for the most diverse forms of lifestyle, work and living conditions, to contribute to a new form of city boundary.

#### Defining the City

In the project, the outskirts of the city take on an organic relationship to the countryside. A clearly defined end to the construction is marked, but the city still remains permeable. City and countryside visually interweave to form a gateway open on both sides. Residential flows and landscape dovetail, optimising an urban balance with nature. The connection of the residential area bordering on the north to the landscape is achieved by the interplay of green wedges.

The concept takes into account varying landscape conditions to the greatest possible extent, further reflected by the variety of expression and construction in both the city and landscaped areas. Clear distinctions exist between private and public space, with public space expressed through the diverse characteristics of each of the islands and as defined by streets, squares and fields, all widely differing from each other, each with diverse individual patterns of orientation.

The variety of urban development and building typology also demands a comprehensively thought through spectrum of appropriate residential building ground plans. The development of living spaces along the railway line in the Dunes were proposed as a new and exciting low energy form. A more open form of construction in the south contrasts with the higher density in the north. Continued on page 8.







# Urban NEIGHBOURHOODS

Sustaining whom or what?

Can urban neighbourhoods really be sustainable? It all depends what you mean by 'sustainable', or for that matter, 'neighbourhood' argues **Joe Ravetz** of Manchester University.

**F**or urban developers, any kind of consumer-friendly building with a hint of green is 'sustainable' – a supermarket with a bottle bank in the car park. For scientists, anything which leads towards prevention of global eco-catastrophe is sustainable – but there is precious little that meets that standard. For people in the cities, anything which enhances quality of life might be 'sustainable' – it all depends on who you ask.

So a first question raised by the sustainable urban neighbourhood is – 'sustaining whom or what?' Another might be, at the risk of being naïve – 'what is a neighbourhood?' And a third question might be, how to unravel the endless complexity of cause and effect in physical and human systems, to bridge the gap between practical action on the ground and a viable long term future for cities as we know them?

## Sustaining whom or what?

A 'sustainable neighbourhood' sounds wonderful, but there are many layers to be unpicked. Some of them are in the diagram below (Fig 1). In reality each of these physical systems is not an end in itself, but is driven and regulated by human needs and demands and inextricably tangled in the linkages between social, economic and environmental spheres.

We therefore have to look for a balance and synergy between many goals. For instance a neighbourhood might be energy efficient but socially divided, or culturally rich but energy intensive: a holistic path looks for the 'win-win' actions which meet both social and environmental objectives.

There are two further sides to the argument – time and space. Few neighbourhoods have ever been static, and the future is likely to bring accelerating change. Neighbourhood location and structure can be seen as a manifestation of economic competition, territorial conflict and class struggle, and each neighbourhood type is a step

on the housing and income ladder for individuals, households and communities.

In practice few of these physical or human systems really make sense at the neighbourhood level. Some neighbourhoods might appear to be overcrowded with high levels of crime and dependency – while social policy might see them as 'problems', an alternative view sees them as opportunities for lower income groups to pass through and establish a place in society<sup>2</sup>. Other more suburban neighbourhoods might lack local services, but likewise perform an essential social or economic role in the city-region.

For a wider view on the sustainability of neighbourhoods we have to look at the context – the 'social city-region' as a diverse and broad-based functional unit<sup>3</sup>. The first question is perhaps the huge growth in household numbers and their demand for space – 'where will the people go?'<sup>4</sup>.

## Local spatial systems

The challenge is to use this major demographic shift as the catalyst for restructuring urban form as suggested by the SUN Initiative. This centres on the dual themes of 'local viability' and 'human scale', where the optimum of local services and opportunities are available within walking distance<sup>5</sup>. It is also important to realise that the bulk of household growth is in smaller units, which have different needs to the standard housing industry 'product'.

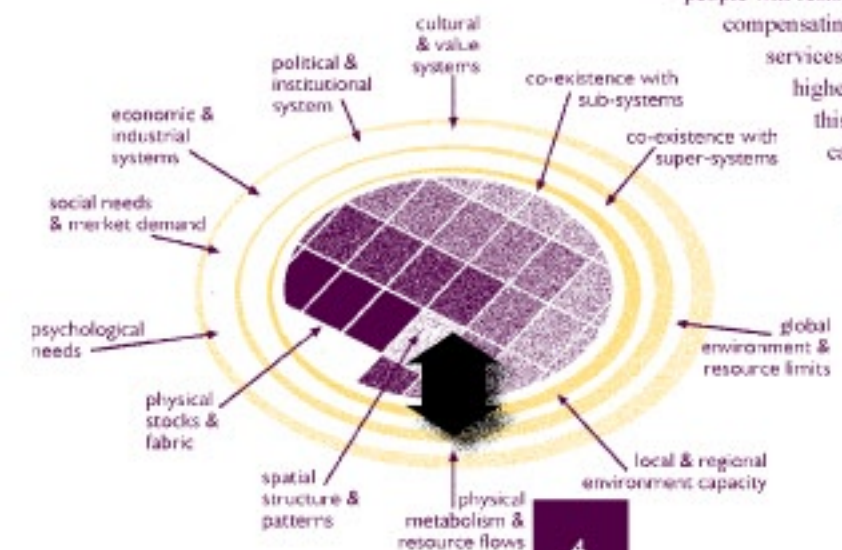
The relationship of density, population size and accessibility can be charted to show

a 'viability' threshold in the region of 10 000 persons/km<sup>2</sup> (Fig 2). This contains a critical mass which can support local services such as secondary schools, within walking distance of most dwellings. However such densities may make it more difficult to meet modern standards and expectations for space in and around dwellings. We therefore have a chicken-and-egg situation – people will resist higher densities without

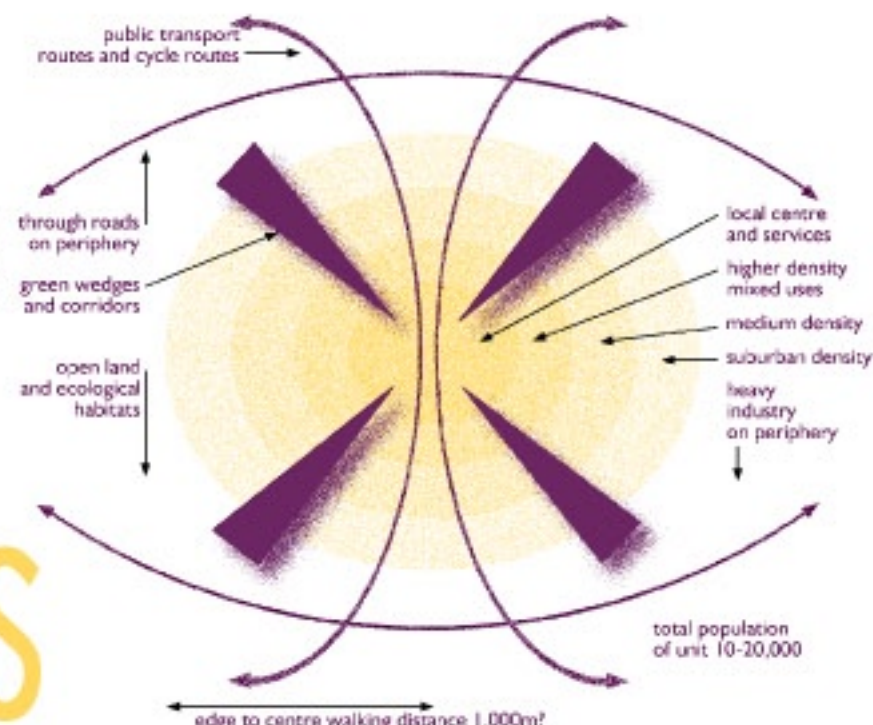
compensating local services, but local services will not be viable without higher densities. To move beyond this impasse, we have to look for catalysts in development policy.

But how far could development policies help to restructure urban form over the next generation? The sample calculation below looks at the effect of 'best practice' poli-

**Figure 1: Sustainable Neighbourhoods:** Outline of 'integrated assessment' analysis for sustainable development.



**Figure 2 - Human scale neighbourhoods:** Spatial model for pedestrian-based clustered development, based on Calthorpe 1994, Bolt 1995



cies over 25 years: this assumes for simplicity an even distribution of local centres and population in a continuous urban area, as found in our study of the Greater Manchester city-region (Fig. 3). Such broad-scale policies might be: half of all new housing to be within 400m or easy walking distance of local centres, each serving 10-15000 population, at average net densities of 125 pph (20-25 dw/acre); and a further quarter of all new housing to be within 400-625m, or the current average distance from housing to local centres, at an average net density of 80 pph (15-20 dw/acre).

The results show that by 2020 nearly a third of the population could be within 400m or easy walking distance of local centres, and nearly 2/3 of the population will be within the current average 625m radius. At present such policies are rare in most local authorities, and there are many barriers to promoting them<sup>6</sup>.

The Manchester City Development Guide, for example, suggests such standards, but making them work may need a greater focus on the vision for neighbourhood units<sup>7</sup>. One view would argue that 'housing capacity' is still seen as a problem of 'numbers and hectares', when the solution lies in a holistic vision for the consolidation of neighbourhood units and local services<sup>8</sup>.

## Local environmental systems:

The spatial pattern of neighbourhood units is clearly linked to transport demand – in simple terms, where local jobs and services are within easy distance, a proportion of local travel can be shifted to walking or cycling, and the clustering of people around public transport nodes increases its viability. But the studies which led to 'PPG13' stressed that density can be considered at various scales, from the city-region to the local unit, and that only if 'planning to reduce the need to travel' was applied throughout, could a reduction in car mileage of up to 20% be expected<sup>9</sup>.

It also seems that local transport demand may be linked to social and economic factors as much as to urban form – the propensity of people to drive for short distances, to avoid the inconvenience of public transport, and to fulfil deep-rooted 'mobility desires' as well as 'travel needs'<sup>10</sup>. European studies confirm that socially 'acceptable' walking distances range from 200m to 1000m, depending on urban environmental quality<sup>11</sup>; and local studies show that public transport usage depends on perceived insecurity and contact with 'undesirables'<sup>12</sup>. This suggests that the 'solution' to sustainable local transport lies in environmental quality, integrated public services and a rebuilding of social cohesion, as much as changes to urban form.

For energy demand and supply, higher urban densities suit combined heat and power (CHP) systems, whose viability increases rapidly at above 40 dwellings per hectare (15dw/acre)<sup>13</sup>. At these densities, dwellings will be more frugal on

internal area: they will abut each other, reducing the overall external wall ratio; and they provide shelter for localized micro-climates, further reducing energy demand in summer and winter. However the scope for passive solar conservatories is reduced by overshadowing at above 37-50 dw/ha (15-20 dw/acre).

The emerging solar photo-voltaic technology may be fully competitive within 25 years: however the theoretical potential will tend to reduce at densities above 50dw/ha (20 dw/acre). In general, improved supply infrastructure may conflict with reduced energy demand: the more buildings are converted to ultra-low or zero-energy

performance, the less viable is any CHP or other localized supply<sup>14</sup>. Whilst local building efficiencies can be greatly improved, energy demand is projected to rise with growth in household numbers, domestic appliances, and standards of comfort<sup>15</sup>. One solution might

be for the optimum balance of improvements to supply or demand to be tackled through a neighbourhood-based 'total energy' strategy and regeneration programme.

Food is also a significant source of energy demand. The net effect of transport demand, energy supply/demand, and food potential are shown very approximately in the chart (Fig 4): this shows significant energy reductions for densities up to 25 pp/ha, and diminishing benefits after that. Higher densities can also enable other environmental services such as recycling, where 'bring' recycling banks can serve larger popula-

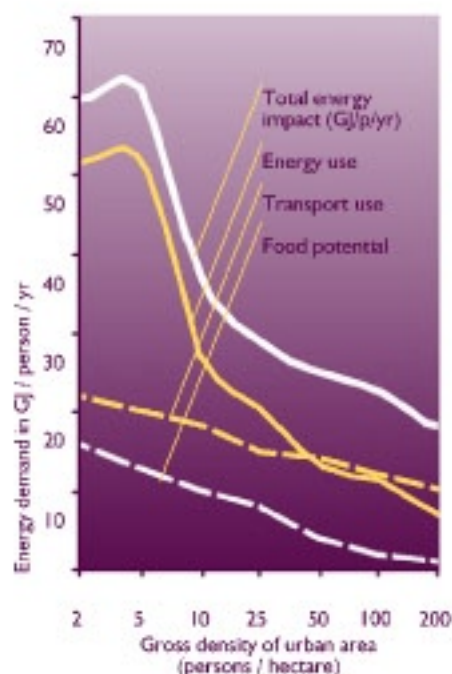
by 2020 nearly a third of the population could be within 400m or easy walking distance of local centres

**Figure 3 - Effects of density policies on urban form in Greater Manchester**

Total population in built-up areas:	2,400,000
Total urban area	55,000ha
Gross population density of urban area	44 pph
Mean density of local centres	1 / 275 ha or 1 / 2.75km <sup>2</sup>
Average spacing of local centres	1.6km
Average distance of population to local centres	625m radius
Exg. Population within 400m of local centres	2,250 18%
Exg. Population within 625m of local centres	6,250 50%
New housing development to 2020 (mid-estimate, including replacements)	220,000
New housing average per local centre	1,100 units 2,400 pop
Housing land required per local centre at current/proposed densities (50 / 125 pph net)	48 ha or 20ha
Housing land required for 1 / 2 of new housing Within 400m at proposed densities of 125pph net	10 ha per centre
Total proposed population & proportion within 400m of local centres	3,500 28%
Housing land required for 1 / 3 of new housing in 400-625m radius at proposed medium density of 80pph	10 ha per centre
Future population & proportion within 400-625m of local centres	3,500 36%
Total proposed population & proportion within 625m of local centre	8,250pp 65%

General estimates assuming continuous gross urban density & distribution of local centres each serving 10-15,000 population. Source: Ravetz 1996





**Figure 4 (left) - Density and total energy:** Estimated average energy demand by urban density. Transport based on travel data & settlement analysis in UK cities and regions; Energy use based on solar and biomass potential, CHP potential and average building fabric losses; Food potential based on calorific value per unit open space in dwelling curtilage. Source: ECOTEC 1993, Owens & Cope 1995

**Figure 6 (right) - Cycle of ex-urbanisation:** Adapted from CEC 1990

**Figure 7 (below right) - Cycle of re-urbanisation:** Adapted from CEC 1990

tions, and street runs are more economic. Higher densities may hinder the storage and re-use of furniture and equipment, leading to greater consumption: shared storage and workshop space could overcome this, depending on social cohesion and trading networks.

In summary, 'sustainable' neighbourhood forms for reducing total energy demand appear to require optimum net densities of 80-100 pph or 35-50 dwellings per hectare (15-20 dw/acre), dependent on orientation, design and layout. Reducing the 'ecological footprint' of a neighbourhood depends on actions for the supply, demand and infrastructure sides at the city-region or national level, and a full picture of local environmental metabolism has to consider both direct and indirect effects<sup>16</sup>.

#### Neighbourhood economy

There is clearly some kind of 'sustainable' balance between economic activity and dependency: a threshold defined in Greater Manchester draws a line at one third of households in dependency, and on that basis over half the city would be 'unsustainable'<sup>17</sup>. Poverty itself is a complex and contested definition – for instance 'households without a car' features in many indices of deprivation, but might also be taken as an indicator of environmental sustainability<sup>18</sup>. An active 'third sector' or social economy can also alleviate material deprivation through mutual aid and non-monetary trading<sup>19</sup>. However if widespread poverty implies a socially unsustainable neighbourhood, widespread affluence suggests environmental unsustainability.

Property values are a rough indicator of the stability and viability of any neighbourhood. Level or slowly rising values provide a base for re-investment in the local physical fabric; but rapidly rising values may indicate displacement of native communities and businesses through accelerated re-urbanization. Falling values indicate dis-investment and decline, leading to fragmentation of social networks and businesses.

As any local economy is vulnerable to global pressures, diversity is the key to longer term robustness and adaptability to change – both diversity in sectors, and in skills and occupations.

The highly geared service sector suburbs are perhaps as vulnerable as former neighbourhoods dependent on single industries. But the inexorable restructuring of the global economy can also enable the diversification of local economies around a new generation of tertiary services, personal services and craft industries.

#### Neighbourhood communities

And what of the people in the SUN? Their livelihood and quality of life rests on a combination of cultural, social, psychological, economic and environmental needs. Where these are unfulfilled, conflict and tension are spread through the social system, of the household, neighbourhood, city or any other unit. Perhaps two qualities underlie the problems and opportunities for social 'sustainability' in any neighbourhood (Fig 5):

- **cohesion** – linkages and networks, mutual support, and capacity for self-help and innovation, within and between communities
- **diversity** – mixing of cultures and communities, with interactions based on mutual co-existence (as with ecological 'biodiversity')

In practice, cohesive neighbourhoods can be exclusive and intolerant, and diverse communities can be divided and lack cohesion. The ideal of the SUN is easily tarnished by the reality of social polarization, which reduces both cohesion and diversity in any neighbourhood. So while public policy cannot expect to change human nature, there is a strong case for a 'normalization' approach to many areas of social strategy and public services with the aim being to achieve balanced and diverse communities. Meanwhile special interest groups should be enabled to create cohesive living and working environments, through housing cooperatives and managed workspace<sup>20</sup>.

Looking beyond the effects of physical urban form, if we ask why and where do people move, the first answers are 'good schools and safe streets'<sup>21</sup>. In education, both state and independent systems encourage social polarization by offering 'choice' to families and communities, and so local house prices reflect local school ratings.

For the safer streets which are crucial to re-urbanization, crime prevention includes physical, economic and social factors. Neighbourhood design for security seeks to create layers of 'defensible space' and encourages public presence on the street. Only a long term neighbourhood strategy can rebuild a positive social structure at street level. An economic response looks at income disparity as a prime factor in property crime, and a social response looks at exclusion and alienation as a prime factor in violent and 'impulsive' crime or disorder: with both hinging on social cohesion and diversity.

#### Neighbourhood politics

To achieve the physical, economic and social objectives above, political power and manage-



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ment capacity has to be devolved to the neighbourhood level as far as possible. This results in greater effectiveness in the 'product' of local services and resources: and greater empowerment through the 'process' of local decision-making.

Countless practical actions depend on localized cooperation and coordination – use of vacant land, recycling and re-use, traffic calming, sharing of cars & household equipment, local trading schemes, social provision such as child-care and many others. But the political representation of 'local communities' is often a minority, overtaken by the wider networks of a globalizing economy – local 'nimby' interests can be defensive or exclusive, as much as innovative or altruistic.

Where township or neighbourhood councils or forums are effective, they generally rest on a common interest, access to resources, legitimization of authority, and appropriate structures: these are the requirements for a new generation of local bodies<sup>22</sup>. Truly representative local democracy has to start from the diversity of public perceptions, needs and opportunities. Such a package can then evolve over time to match local needs and resources with inward investment and local regeneration programmes.

#### Barriers to sustainable neighbourhoods

The final question is perhaps the hardest – if sustainable neighbourhoods are so great, why are they so difficult to achieve? The balance of forces which should create and maintain the SUN needs to be resilient to destabilizing pressures, but at present the 'sustainable' friendly corner shop can be destroyed overnight by an out-of-town super-market.

Again we have to look beyond the neighbourhood unit at the compounding of social, economic and environmental pressures and trends across the city-region (Fig 6 and 7). Physical restructuring results in a 'low-entropy' jumble of urban form, while local centres are degraded by traffic, and the city continues to 'hollow out'. Car ownership brings status in contrast to public transport, while longer journeys are encouraged by specialization in jobs and services. For environmental systems such as energy, falling prices make investment in renewables more difficult, and market uncertainty hinders CHP development.

Economic restructuring brings decentralization of production, specialization of labour and employment markets, economies of scale in public services, and the pressures for large-scale and single-use property development. Social restructuring results in polarization of communities, demand for space and territory, fragmentation of kinship networks, and consumer choice in services and leisure.

These barriers, and many more, appear to be endemic in the urban restructuring process. So the challenge is to match the pressure of globalization with the opportunity for localized human-scale development – a shift from 'quantity' of space, mobility and goods, to 'quality' of life and community. This requires a reversal of the above 'vicious circle' of compounded trends towards a 'virtuous circle'. To be long lasting and adaptable – in other words, 'sustainable' – SUN models also need to be directions for change and evolution rather than fixed blueprints.

Joe Ravetz is researcher based at the University of Manchester. His book on the 2020 project has recently been published on Earthscan



**Figure 5 - Sustainable communities:** Outline of cultural diversity & social cohesion relationships, with generalized examples. Source



'It is at the edge that man is at his best, that life is most vibrant. It is the lure of water, its spell, its reflection, its endless movement and change, that best captures man's imagination and provide a variety of applications from business to recreation, from calm to passive activities, the water's edge is where life is

Rediscovering the

# waterfront

**W**hereas continental cities such as Hamburg and Amsterdam have always treated their waterfront as part of the city's heart and soul, until quite recently British towns turned their backs on their waterfronts. Though most British towns and cities grew up alongside canals, rivers and docks these waterfronts were dominated by industry and became forgotten or even dangerous 'no go' areas symbolised in films like 'On The Water-front' or the 'Long Good Friday'.

A 1989 URBED survey sponsored by the Royal Town Planning Institute found a very different picture. The magic of the urban waterfront had been discovered, often inspired by well publicised projects in Boston, Baltimore, and other US cities. Many more projects were underway and interest had spread to inland waterways including major schemes in cities such as Birmingham and Gloucester, as well as many smaller schemes that never received much publicity. Over 90 schemes were identified, 63 of which were on rivers, 27 on canals with the balance on ports and harbours. While the schemes included every imaginable use, genuinely mixed-schemes were disappointingly rare. Housing for sale was the predominant use in 30 schemes and a further 16 included an element of housing. A smaller number of schemes included leisure and recreation although retail and car parking was also common. In hindsight this activity on the waterfronts of 1980s was the origin of many of the regeneration ideas which have dominated urban policy since then.

While these waterfront schemes may have been inspired by American, the lessons were not always learnt which sometimes led to disappointment. It is important to remember that these US waterfront schemes were part of a wider movement to celebrate the downtown and urban values, walkability and sense of place.

Less inspiration has been drawn from Europe although the lessons there may in fact be more relevant. Waterfront schemes in Europe have been successful in encouraging people to live in city centres and in sustaining a livelier street life. Indeed some of the liveliest waterfronts are not in the

In 1979 and 1989 URBED undertook surveys of waterfront development in the UK. It therefore seemed only right that we should do the same. The result is the 'Urban Waterfront' research project which will give a unique insight into 30 years of waterfront development in the UK. **Nicholas Falk and Kieran Yates** reviews work in progress.

## Waterfront urban quality criteria

### Spirit of Place

- Positive relationship established with body of water
- Buildings and spaces assert a clear role and function
- Vitality and viability achieved from appropriate mix of uses and public realm quality

### Integration to Context

- Connections and linkages to wider urban area established
- Socio-economic circumstances, local culture and heritage acknowledged
- Public access and usage opportunities

### Resourcefulness

- Waterside ecology and water quality protected or enhanced
- Opportunities for innovative and active water uses
- Development makes optimal use of site and intrinsic assets including re-use of buildings

US but in cities like Stockholm, Venice, and Istanbul that are bustling with boats.

As Azeo Torre in his book *Waterfront Development* suggests successful developments, whether they be in the US or Europe have a number of things in common – image, authenticity, and function. They have created a mix of uses which does not feel artificial and have generated a life of their own rather than being purely a visitor experience. Yet successful schemes must also engage the public because, as he says 'it will be their attachment to and attendance at the development that will allow it to live or die'.

After twenty years it is clear that the potential of waterfronts is enormous. The initial battle may have been won but achieving high quality schemes which meet Torre's test of image, authenticity, and function remains difficult. Information on best practice remains patchy and difficult to disentangle from the hype that inevitably accompanies schemes. Much publicised projects such as Newcastle's Quayside or Birmingham's Brindley Place may be inspiring but hardly provide models for the many smaller towns that are now trying to regenerate their waterfronts.

Waterfront development, like urban regeneration generally, is most effective when it is done gradually rather like creating a garden. It is relatively easy to sweep away the past for comprehensive development but the results can often lack soul and identity. Investors and planners need to understand

how areas evolve and how different uses establish themselves in a kind of ecological succession, with for example, artists often acting as pioneers. This means taking a balanced perspective, and understanding the role of communities and local authorities, as well as that of the private developer and investors.

Planning has a crucial role in securing the best in waterfront development through an understanding of area needs and character through the use of development briefs, consultation and planning requirements. While no one waterside site is the same and should be approached afresh, fundamental aspects of successful waterfront development are surprisingly universal. Four major waterfront typologies have been identified:

- Landmark** - Portsmouth millennium tower
- Quarter** - Castlefield, Manchester
- Linear** - Mile End Park strategy, London
- Local** - Merton Abbey Mills, London

Urban design principles can be utilised to interpret and codify aspects of successful development. By using urban quality criteria comparative assessment within each waterfront category can be achieved and lessons for success or otherwise ascertained.

Delivering sustainable urbanism is the key to the revival of our towns and cities, waterfronts have and will continue to be at the forefront of change.

The Urban Waterfront project is sponsored by English Partnerships along with King Sturge, Crest Homes and British Waterways

**Melbourne Docklands, Australia:** A successful property led regeneration initiative achieved without the support of public funds but also without the input of the public. A partial model for UK urban waterside renaissance!



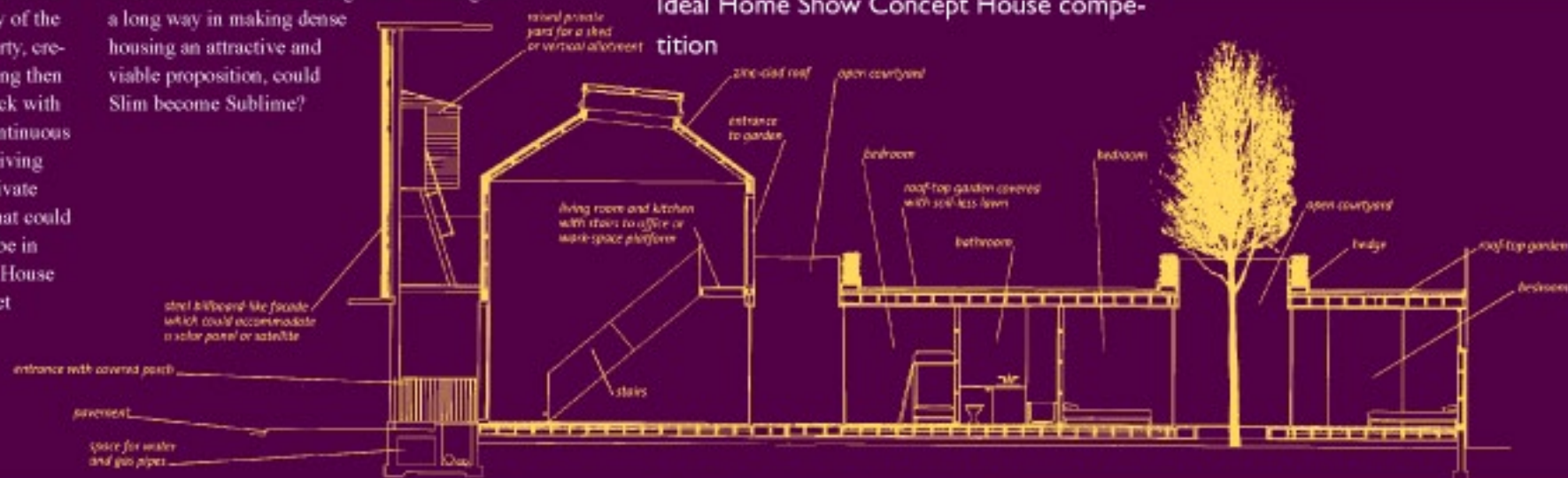


# Simply Slim

What is your idea of the 'ideal home'? This question posed by the RIBA Concept House 99 competition sought to reinvent the English terraced house. The winning entry built for this year's Ideal Home Show will be the first to offer an urban vision of the future, but have they got it right? Slim House by Pierre d'Avoine Architects updates the terraced house for the next century, offering flexible and attractive accommodation for a range of potential households. It is ingenious in that the building footprint makes total use of the available site, integrating what is often the forlorn front garden and backyard into two internal courtyards. From here on in is new territory; the main body of the house separate to the façade of the property, creates in effect a vertical garden, the building then starts with a conventional two storey block with single storey to the rear, in doing so a continuous roof platform is created over and above living accommodation. The outcome is both private and social, compact and spacious, yet what could the implications of this form of housing be in terms of neighbourhood character? Slim House presents well articulated interior space yet

curiously chooses to ignore the street. The vertical steel façade offers a striking face, but one might question its desirability.

Streets are crucial aspects of urban life and are an intrinsic aspect of neighbourhood conviviality and liveability. Interaction between buildings and the street is an urban fundamental and is ignored at the urbanists' peril. It is the quality of urban spaces, such as local streets that define the character of the neighbourhood, however it is the buildings that frame the street scene and not the street itself. The investigation of the potential of urban housing is positive and a welcome shift from semi-detached thinking. Slim House goes a long way in making dense housing an attractive and viable proposition, could Slim become Sublime?



Kieran Yates looks at the winner of the Ideal Home Show Concept House competition

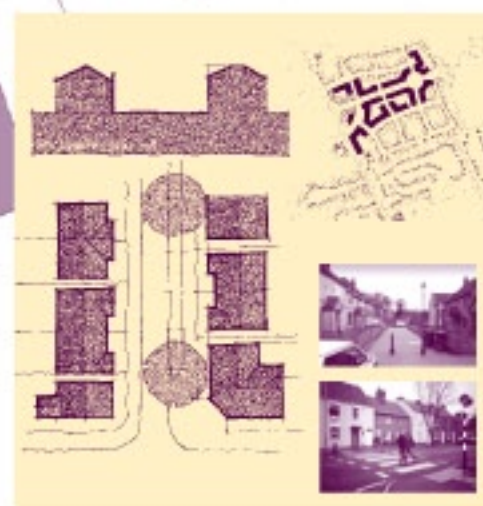
Rather than developing a master plan the brief was based upon a very basic indicative layout and a series of guidelines for each type of street (below right). Only once this had been done was an indicative layout (main illustration) done to show how it could develop.



## Long Leys

a village in the city

The local plan for Lincoln identifies two urban villages. The smaller of the two involves the redevelopment of a hospital. **David Rudlin** describes the development of a brief for the site which explores a gentler form of urbanism.



Despite the fact that St. George's Hospital lies only a mile or so from Lincoln City Centre it is surrounded by countryside. Originally built as an isolation hospital the site sits within one of the green wedges which penetrate into the very heart of the city. When one of the two NHS Trusts on the site declared the land surplus to requirements the City Council saw an ideal opportunity to promote the site and the adjacent housing and industrial areas as an urban village.

However allocating the site as an urban village is one thing, implementing it when a

sale agreement has already been reached with a private developer, quite another. This is particularly true when the land currently available for development is just a small part of the urban village identified by the council.

We have therefore been working with council officers and local people through a mini design *Charette* in Lincoln to develop a brief for the site. This has drawn upon the Duany Plater-Zyberk model by developing a very simple structure of blocks and streets for the site. Different character areas were then identified which were set out on, what DPZ would call, a regulatory plan (inset plan). For each of these character areas guidance was developed in the form of a typical street plan and section and a set of critical dimensions. The example shows the Compact Urban character area, the others being the village centre and fringe residential.

The guidance for each of these areas was based upon tissue analysis of exemplar areas in Lincoln including both traditional areas and new development. This helped to ensure that the scheme had a local character as well as being useful in illustrating the nature of each area and proving to developers that they were viable. Once this had been done an illustrative layout was done for the site (main plan) although this was only intended to show how it could look rather than to be a master plan.

The nature of the site meant that we were not looking at the sort of high density mixed-use urban village that you might find in a city centre. However we were able to increase the number of units on the site from 169 to 224 (only 19 of these additional units were flats). This was achieved by increasing gross densities from 20 to 27 units to the hectare (from 8 to 11/acre). This meant that we achieved a 32% increase in housing and yet only increased the length of road and infrastructure by 17%. The village centre was additional to these figures. Here densities were further increased to 35 units/hectare (14 units/acre). This accommodated another 69 units giving a total site yield of 293 units.

The scheme shows that new forms of urban development need not be radical. The scheme gently increases densities and creates a sense of identity on traditional streets while still producing a viable scheme using the sort of housing that developers desire.

At the time of going to press the brief is out to consultation and will be considered by committee in March. Contact: Steve Kemp, Lincoln City Council, 01522 01522 email dplan@lincoln.gov.uk





Continued from page 3...

The accommodation of vehicles in an underground car park along the northern denser area is seen in contrast to the decentralised concept of dispersed open parking in each of the residential islands. A pedestrian network connects all of the residential islands, enabling residents to enjoy the qualities of the open landscape.

#### Creating an Urban 'Coastline'

The creation of many islands maximises the urban 'coastline' to nature, thus facilitating immediate access to the country for future residents. In order to protect the natural landscape and maintain its original character, the islands will be laid out and built as compact city areas in such a way that they appear as city fragments in the existing landscape. Each island develops its own individual character and identity while at the same time being integrated into the collective of the Archipelago's island world as a whole.

This island arrangement, along with the three orientation points – the Gateway, Emblem and Tornado – allow for freedom of development. The heterogeneous nature of the islands can only further gain in character through such a process. The urban development concept can also be

realised over a longer period of time, without the whole concept being compromised, and through its physical and visual variety it is also expected to attract good market values.

The city outskirts not only mean the dispersion and thinning of the masses, but also the slowing of time, expressed visually in an appropriate area whose character is defined by departure and arrival. In this way, the planning area Lichtenfelde Süd proves itself to be one of Berlin's most significant topographies, as well as being a paradigm of Berlin's city boundary. The light and progressive nature of this outlying development negates the need to draw on the reductional, the historical and on the nostalgic, which have in the past defined the outskirts as the end of the city alone. 'Visible Cities' are experiencing a rebirth, their driving force being on the city outskirts.

This article was edited and translated by Wendy James from Studio Libeskind. Their work currently includes a proposal for the second Millennium Community at Allerton Bywater (to which URBED has contributed through the SUN Initiative), the Imperial War Museum for the North at Trafford, and the extension to the Victoria and Albert Museum in London.

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SUN Dial is now entering its third year and is establishing a substantial back catalogue of articles. We list below the articles that have appeared in SUN Dial and would be happy to send copies out to people who are interested. SUN Dial 1 and 4 are now out of print but copies of the articles are still available.

#### SUN Dial 1 Summer 1996

- Introducing the SUN Initiative
- New Urban Models: traditional principles

#### SUN Dial 2 Autumn 1996

- Environmental Sustainability and the Urban Neighbourhood
- The role of Community Heating: Michael King Combined Heat & Power Association
- Homes for Change: SUN demonstration project
- From Neighbourhoods to City Regions: Strategies for the future Joe Ravetz Manchester University

#### SUN Dial 3 Spring 1997

- Ensuring lasting solutions: Social sustainability and the urban neighbourhood
- The decline of the family and the Sustainable Urban Neighbourhood
- Stemming the tide: the Five Estates in Peckham Simon Bevan Southwark Council

#### SUN Dial 4 Summer 1997

- Model neighbourhoods - SUN principles
- The model sustainable urban neighbourhood?
- Live-Work: Bringing work home
- Advanced Technology Housing Marcus Widdowson Avery Associates
- Bicycling and the multiple main street model Richard Roseburg - Los Angeles

#### SUN Dial 5 Autumn 1997

- Managing gridlock: a sustainable transport policy
- Could housing co-operatives have the answer? Andy Huxford Homes for Change Co-op
- Living over the shop Ann Petrenko University of York

#### SUN Dial 6 Summer 1997

- The eco-neighbourhood: a brief for a sustainable urban neighbourhood
- Foyers: One in every town?
- City Life: City Limits: Town centre living Dr Nicholas Falk
- Re-cycling: no longer a middle class fad Keith Collins London Pride Waste Action Programme
- Urban mines: Sustainable growth park James Home Urban Mines Ltd

#### SUN Dial 6 Summer 1997

- Urban Autonomy: Is the autonomous urban neighbourhood possible?
- Green Frame Gordon Snape North British Housing Association
- LETS Systems: Design and development issues Rob Squires
- What shapes urban attitudes? Dr Gary Bridge School of Policy Studies Bristol University
- Tomorrow: a peaceful path to urban reform A summary of URBED's report on urban housing capacity for Friends of the Earth

Uncredited articles written by David Rudlin, Nick Dodd or Kieran Yates

### Building the 21st Century Home



David Rudlin & Nicholas Falk

#### Building the 21st century home: The sustainable urban neighbourhood – David Rudlin & Nicholas Falk

Over the last three years we have been working on a book which explores the issues behind the sustainable urban neighbourhood. It is written in three parts. The first charts the fall from grace of cities and how public policy, however well intentioned, has made things worse. The second part then looks at the forces for change which are gathering at the turn of the millennium and how demographic, environmental, social and economic change will shape future settlements. Part three then describes a vision for the Sustainable Urban Neighbourhood as a model to reinvent towns and cities. This is not just a physical model and chapters are devoted to the social sustainability of neighbourhoods, to environmental urban design and the process by which change can be brought about.

In the book we quote Lewis Mumford when he wrote 'if we would lay a new foundation for urban life we must understand the historic nature of the city. It is our hope that we do this and that the book will help to reveal some of the deeper currents behind the froth and bubble of the current debate over cities and urban areas.'

Published by: The Architectural Press 1999  
Price: £19.99  
Available from: 'All good bookshops'  
ISBN: 0 7506 25287



**Ferensway in Hull:** A submission by Amec for a 23 acre site on the edge of Hull which includes a mix of retail, leisure and high density residential development. The scheme was master planned by Syam Khandaker who provided a framework for a series of local architects. The scheme incorporates advanced environmental specifications including wind turbines and photo-voltaic cells.



The Sustainable Urban Neighbourhood Initiative is managed by URBED and funded by a range of sponsors. The Autonomous urban development project is funded by BRECSU administered by the Building Research Establishment and the European Union's ALTENER Fund.

The SUN Project is managed from URBED's Manchester office by David Rudlin, Kieran Yates, Nick Dodd and Helene Rudlin.

The views expressed in this newsletter are those of the authors and do not necessarily represent those of the project's sponsors

This news sheet has been researched, written (unless otherwise credited) and designed by URBED which is a not for profit urban regeneration consultancy set up in 1976 to devise imaginative solutions to the problems of regenerating run down areas. URBED's services include consultancy project management, urban design and economic development. The SUN Initiative further develops URBED's involvement in housing development and continues the work of the 21st Century homes project.

#### Why NOT get involved?

The SUN Initiative has been established as a broadly based network of organisations and individuals interested in the sustainable urban development. We do not have a membership but if you do not normally receive this newsletter please contact us and we will add you to our mailing list.



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