

# The changing face of cities

Professor Anne Power



Cities are at the centre of human civilization and invention: even very elementary ancient civilizations worked out ways of gathering people together and then pursuing progress, always around a collection of buildings and people. Out of that emerges an unbelievably complex social and physical structure – the city.

Cities are constantly changing. One of the reasons they change so much is that they generate wealth, but that wealth then tends to destroy its users, partly through the dependency it creates on the wider environment, and partly through the dependency it creates among the poorer people who help to create the wealth. It is a circular process of interdependence, which fails if cities overexploit their surroundings or their people. Throughout history, the story of cities has been of rise and then fall as a result of overexploitation, although we often find this difficult to accept.

The only way cities can gather wealth is by taking it from the surrounding countryside, and in the early stages of city growth that generates wealth. Simultaneously, in generating immense wealth, the environment on which the city depends is being destroyed, as is now being experienced most acutely maybe in fast-growing cities in China. The ancient Mayan and Cambodian civilizations or the relics of Zimbabwean cities make us wonder how and why they rose and fell. Usually, it has been because cities are such vast exploiters of the labour that builds them and the land they use that there is a constant tendency to overreach capacity.

Cities are human and natural structures

There is a constant tension between the man-made nature of cities and the natural environment on which they depend. Are cities part of the natural world, somewhat akin to ant hills or bee hives? Are they a phenomenon that human beings create as part of nature's family home? Or are they something separate from nature, even unnatural? For many, their very decline and destructibility is proof that they are part of nature. The tension between what is man-made and environmentally harmful in cities, and their intrinsic dependence on the natural environment, is one of the biggest problems of modern cities.

Buildings produce 50 per cent of all the carbon that we emit in the United Kingdom, and cities represent by far the biggest collection of buildings and infrastructure. Energy consumption and environmental impact are therefore in the nature of cities, as is the huge waste production that goes with



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them. Without cities, carbon emissions would not arise at their current intensity and scale. Urban systems that support buildings and infrastructure – transport, trade, production, services, culture – likewise rely on buildings, materials and the energy they consume. Because cities create most of the wealth of modern society, we sometimes forget the vast throughputs on which they rely.

On the other hand, the concentration of buildings in cities makes jobs, schools, transport and other services more accessible and more shared. So it should be possible as a result of collective provision to make cities less energy intensive than their surroundings. In practice the exact opposite is true at the moment.

There have been a number of examples of city systems totally failing. John Reader's book *Cities* (2004) details the mass starvation faced by the city of Berlin in 1917; it was close to a crisis of no return. Today, Berlin stands as a much smaller city, having overreached its environmental and social capacity, having had neither an adequate food supply nor the ability to command the food supply from other people, and so reaching starvation point under the duress of war. The ability to respond to crises is an important aspect of a city's resilience.

In 2000 the river Danube, which straddles 11 countries and flows through several capital cities, reached a tipping point that nobody had anticipated. All the countries along its banks suddenly faced an ecological crisis, not just because fish and plants were dying, but because the level of pollution made the water unusable, putting the cities' water supplies at risk, and reducing drastically the quantity of water flowing downstream. Navigation and river transport were severely curtailed. This vast river that cuts through urban Europe suddenly needed the World Bank, the International Monetary Fund, the European Union and the 11 countries from both Eastern and Western Europe to combine in an attempt to rescue it. Its devastating flooding of central European cities in 2005 only confirmed urban vulnerability to nature, as extraordinary rainfall could no longer be absorbed in the built-over hinterland.

New York also faced a severe ecological crisis in the past few decades, when crime rose to unparalleled levels of violence and killings, and the city came to be considered virtually unmanageable. A critical point arrived when the city could not fund itself, and its water supply was under threat. The sprawl out of New York, partly driven by crime, poverty and urban breakdown, put intolerable stress

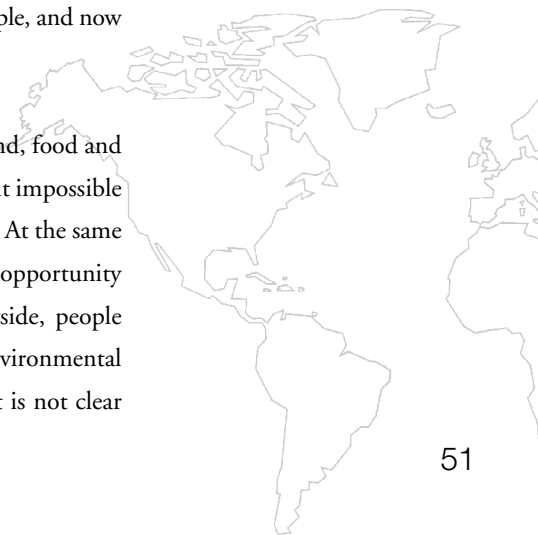
on the water table and the water supply that fed the city. New York had to change many policies to rectify this crisis, including reworking outer suburban housing developments that would jeopardize the city's water management capacity.

The story of the River Thames in London is well known. Deeply polluted by sewage and industrial pollution until its major clean up in the 1950s, it recently became a sewer again for the first time in decades. In the summer of 2005, the Thames Water Authority was forced on several occasions to release raw sewage into the river to stop the whole vast drainage and sewer network of London from flooding. Thus we can see that even the most sophisticated cities depend on their surrounding environmental resources for their survival. If this is stating the obvious, then cities certainly do not behave as though it is.

Cities are ill-understood predators

We are living in an urbanizing globe, as an increasingly urban species that has been on the march for a very long time. The United Kingdom has been 90 per cent urban since the turn of the 20th century, with 60 per cent of the population living in large cities. Europe as a whole is 80 per cent urban. The world is roughly 50 per cent urban, and by 2030 this proportion will probably rise to 65 per cent. The trend across all human society is toward an increasingly urban order. This is illustrated by the fact that in 1950, less than 1 billion, or a third, of the total world population of 3 billion lived in cities. In 2000 3 billion or half of the 6 billion global population was urban, and by 2030 the urban population will be 5 billion, or nearly two-thirds, out of a total population of 8 billion. It is an accelerating trend. To illustrate the point, in 1980 there were only seven of what the UN calls megacities of over 10 million people, and now there are 20. In 1900 there were only four cities of a million or more, today there are 420.

The huge march of urban change has been driven by two main factors. Problems of land, food and water supply, desertification and population growth have created “push” factors that make it impossible for the rural environment to sustain the populations that were previously held on the land. At the same time there are very big “pull” factors: the attractions of cities, such as freedom, wealth, opportunity and security. Here lies the contradiction: if cities were not wealthier than the countryside, people would not be drawn to them. But making cities wealthier comes with an enormous environmental price extracted from the countryside, thereby driving an accelerating urbanizing trend. It is not clear



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whether we can enjoy the kind of wealth we enjoy today – which makes cities so appealing – without consuming too many resources.

An interesting consequence of the greater freedom, wealth and opportunity that cities offer is that cities in the developed world are dispersing. As countries get richer, and as they urbanize to a greater and greater extent, so cities spread out, and that is when the real environmental damage takes off. Cities already rely on a huge land area, many multiples of their own footprints, but there is a balance that can be overstepped. London requires 293 times its own land surface area – more than the whole area of Britain – to sustain its huge consumption of energy and resources. This is partly based on Britain's colonial roots and historic, as well as modern, trading relations. Land is a critical factor, for cities cannot survive without viable land.

China has recently become a net food importer as a result of its rapidly advancing urbanization pattern. As more people are now living in cities, so an increasing amount of land that was once agriculturally productive is now being used for cities. Ancient Rome collapsed for many reasons, but a large factor was that it consumed too much forestry and water, and needed to import too much food. It relied on too much land. As cities spread out, incrementally and cumulatively, they use up the environmental resources that they need to support them.

The complex interdependencies of cities and their environments suggest that cities, with their vast agglomerations of power, activity and consumption, are ill understood, and that we barely manage them. Cities on the other hand are remarkably adept at pulling back from the brink. So we may change the way we behave and solve problems as urban pressures grow.

### Sprawl leads to neighbourhood decline

One factor that drives the outward movement of urban dwellers is that households tend to become smaller as populations become richer. Households are shrinking unbelievably fast across the developed world and have already done so in the United Kingdom, where the average number of people in a household is now about a third of what it was at the turn of the last century. As a result households multiply with low population growth. That means that three times as much land is required to house the same number of people at the same density of households. However, as standards rise, people want



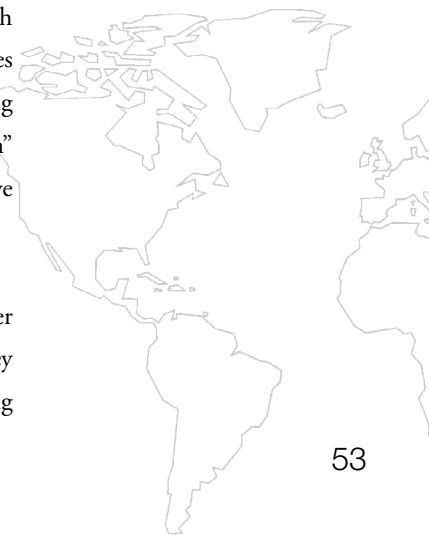
more space per household – for their cars and their gadgets. So density of households falls alongside household growth. Meanwhile, the density of people plummets and the distance between them grows.

Older inner areas of cities constantly shift from being too dense to being too thin. This is one of the biggest problems the United Kingdom faces today and one that is shared to some extent with the rest of Europe, although the continent tends to tolerate greater density. As a result of the decline in manufacturing, there are vast industrial wastelands across the North and Midlands of the country, with used land full of vacant, polluted and derelict spaces. Semi-abandoned, contaminated land, scattered with remaining housing and old warehousing, can be found in the Thames Gateway too, from Fenchurch Street to Southend, looking more like a northern industrial wasteland than part of London.

The phenomenon of urban sprawl brings with it deep neighbourhood polarization and social problems. First of all, the fabric of cities – the buildings that are the creation of man in a natural environment – suffer wear and tear. If they are built like Windsor Castle or Chartres Cathedral, that wear and tear gives them a certain attraction. But if they are old terraced houses they become leaky, and if they are modern concrete blocks, they become rain-streaked and grime-laden, with cold communal areas, allowing the damp in, and warmth out. All this long-term wear and tear on the fabric of cities causes people to move away.

There is a constant urban exodus, with a sifting outwards of better-off people and a holding back of those who cannot afford to move, and then a sifting inwards of poor people who have no choice. Often migrants fill the spaces; from rural areas in the early stages of urbanization, later on Commonwealth migrants and, today, migrants from many different places, including Eastern Europe. The sifting drives the decline of inner areas: slow decay, poorer populations replacing better-off ones, areas becoming unfashionable, and then fewer people. If it is a pressured city, and if reinvestment leads to “gentrification” – upgrading for better-off people – then this decline may turn into recovery on the back of the adaptive mechanisms of cities.

About two-thirds of the United Kingdom is losing population from older urban areas, and the inner cities are losing people faster than anywhere else. Schools, shops and transport deplete because they cannot be sustained – for reasons of low income and population loss. That increases suburban housing



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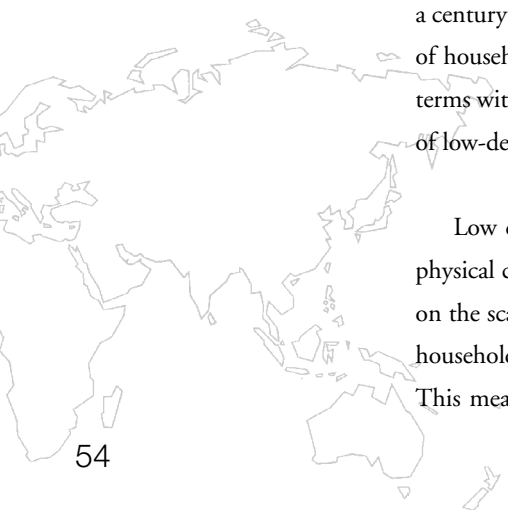
demand even when there are enough existing homes. In the North where there is a large surplus of housing, and in the Midlands where there is a smaller surplus, there is still a big demand for new homes in outer suburban areas. Stoke-on-Trent plans to demolish 14,000 terraced properties, which are said to be “unsustainable”, and to build 14,000 new houses around the edge of the city on green fields. Burnley and Newcastle have similar strategies. The greater the building of suburban housing, the more the decay of existing areas deepens. If their urban economy is already fragile it can lead to breakdown.

### Cities work as dense structures

Density is a critical factor in the viability of cities. Until very recently, including cities in the developing world, density was both a result of the wealth of cities and the cause of it. Density generates urban interchange and urban services. In the United Kingdom in 1900, the average urban density was about 250 homes per hectare, leading to a density of about 1,500 people per hectare, and there was necessarily a strong community spirit. By 1950 density had dropped to 500 people per hectare, a third of previous levels. By 2005 average density was below 35 homes per hectare, around 80 people per hectare, which is below the minimum level of 50 homes per hectare necessary to support a local school, a frequent bus service or local shops. Even in London, where the average density is 45 homes per hectare, there are many areas, particularly eastwards into the Thames Gateway, where the population is too thinly spread to support essential services.

Consider density in this way. It is the density of households that creates housing demand, while it is the density of people that creates services; but household size is down to 2.2 people per home from 6 a century ago. With households at a third of their previous size, there need to be three times the number of households *in the same space* to keep up services, schools, local shops and so on. We must come to terms with the idea that cities work on the back of people density. This cuts across the prevailing reality, of low-density cities and the dominance of cars.

Low density, smaller households and car dominance undermine cities socially. But there is also a physical constraint. The future of cities cannot be built around cars, because the cars just will not fit in on the scale that we currently want to use them. Car ownership expands with household growth, so as households shrink in size and grow in wealth, the number of cars increases per head of the population. This means that cars can no longer easily fit into cities like London. As a result there are now large



penalties for parking vehicles where not allowed. It is not worth driving into the centre of the city without a special parking permit. London has had to begin to tame cars in order to fit the people in.

### Housing needs to reuse land

Cities require a certain flexibility. In the period of intense urbanization, it seemed acceptable to spread outwards – until we began to run up against energy problems, congestion problems and land-supply problems, to the point where it has become impossible to sustain current land-use patterns. Despite the UK Treasury's intention to meet the building targets of the 2004 Barker Review of Housing Supply in the southeast, we will be unable to deliver them under present scenarios. The Eastern Region water authority and the Environment Agency have confirmed that the target of extra homes for the region is unattainable because of water problems in the Eastern Region. The Kent part of the Thames Gateway faces the same difficulty. Higher density within the existing urban frame of London is therefore inevitable, and not impossible. Our study of the Thames Gateway showed that all the housing that the government wanted for the area could be fitted in the already built-up, low-density London part of the Thames Gateway, which is only about a quarter of the total area.

If we compare land-use patterns across the world, we find that Europe uses on average 6 hectares per person to sustain current levels of consumption, the United States uses 9 hectares and Bangladesh 0.2 hectares. The average land area per person available globally is 2 hectares. As the world urbanizes in an overpopulating globe, then migration, energy intensification, and environmental damage resulting from cities' need for environmental support, are bound to get worse. We have to shrink our land-use needs to one-third of today's in order to survive.

Cities are collective structures. At reasonably high density, the problems are visible enough to demand attention. At low density, spread over distant suburbs, there is a danger that social and ethnic separation, overreliance on cars and overuse of land cumulatively overtake us. For suburbanization lulls the more affluent into comfortable complacency. The resulting inequality and polarization threaten social stability. The biggest worry for the leaders of cities is that inequality and polarization will make cities unmanageable.

### Urban recovery is possible

There is huge potential in urban renewal. Cities must have quality homes, a quality environment and



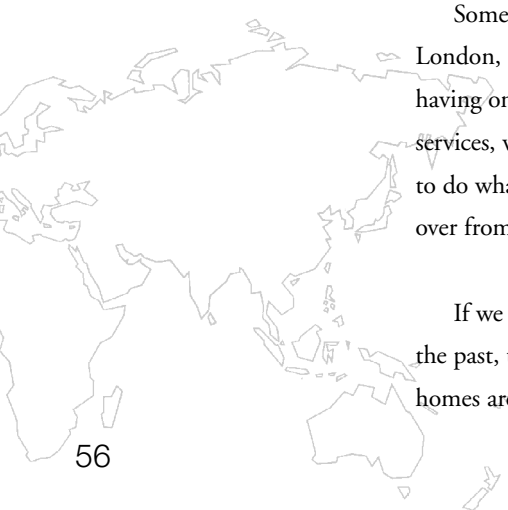
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quality services in order to retain the people who are currently moving out. But often the best-quality, most attractive homes are old. Renewal is essential for urban survival, and the building blocks for renewal are the neighbourhoods where older homes dominate. Traditionally in the United Kingdom the approach was to get rid of bad housing and build better housing instead, but this is a problematic solution because it is very energy intensive, waste producing and socially polarizing. The poorest people will always lose out and the better-off will move out. The city is left emptier, barer and more polarized as a result. The alternative, which developing-country cities have no choice but to use, is “slum upgrading” and infill development; this is generally much more successful. It has also proved to be a powerful tool in London, the United Kingdom’s most built-up city.

One of the problems with urban and neighbourhood renewal is that it can promote the take-over by wealthier people of older, poorer housing with the aim of renovation and upgrading commonly referred to as gentrification. This trend is a common argument against upgrading because “it hurts the poor”. However, if poorer people can stay as empty homes are improved, it helps poorer communities recover as well as maximizing the value of underused neighbourhoods. As cities lose population, some low-level gentrification is desirable in order to encourage people to stay: people in work, people who are ambitious for the city, people who demand and are able to organize better services, teachers, health workers and shopkeepers. At the moment, in poor areas of cities, doing up formerly poor housing and attracting better-off people is primarily beneficial, as long as a supply of affordable housing is maintained.

Some people argue that having extremely rich people in poor areas, as is the case in most of inner London, is polarizing in itself. But these mixed communities are a lot better for inner London than having only rich people and pushing all the poor people out, or having only poor people and collapsing services, which is how it once was. The big urban challenge, and London is an acute example of this, is to do what Jane Jacobs argued for – to improve cities within their existing frame without tipping them over from being “mixed” communities into “elite” ones.

If we take seriously the fact that we cannot simply go on using land and energy the way we have in the past, then we have to find ways of making the homes we do have work harder for us. Most existing homes are in city neighbourhoods – using “city” generically to cover all built-up urban areas.



Some 99 per cent of all our homes are already built, but they need upgrading, improving and making more efficient. Even a big demolition programme – much bigger than the slum clearance programme we ran in this country before and after the war, wrecking the cities for 50 years – would not solve the problem of renewal. The largest possible new-build programme along the lines that the UK Treasury is recommending, coupled with the most ambitious slum clearance programme, would still mean that at least 70 per cent of the homes that we will have in 2050 already exist. Since homes emit 27 per cent of all our carbon and are dependent on the other buildings that together emit 50 per cent of all our carbon, we have no choice but to tackle existing homes in existing neighbourhoods. Although the average existing home is extremely inefficient and a new one is much more energy efficient in its use (rather than in the energy it takes to build it), potentially existing homes can be upgraded very easily to save at least half their energy use.

At the moment the United Kingdom has the challenge of 9 million homes with unfilled cavity walls, 20 million underinsulated roofs, 7 million terraced homes, not fully modernized, and 7 million semi-detached houses needing constant upgrading. That is a huge improvement task if we want to make existing neighbourhoods work. Without upgrading the homes that already exist, we cannot reuse the land that lies between the houses, nor the existing infrastructure, which has developed over the 200 years of our recent urban history. Other developed countries face a similar task.

Urban neighbourhoods can help

In thinking about how to tackle the problem of renewal, urban neighbourhoods can be divided into three classes. First comes the top 10 per cent, a small group of “self-regenerating” neighbourhoods, based on high wealth, high-quality collective conditions and services. Kensington, or perhaps Mayfair, epitomize this class of self-regenerating neighbourhoods in London. The second group, covering 70 per cent of neighbourhoods, can be classed as “wear-and-tear” areas. These are gradually declining, with their infrastructure slowly wearing out. Unless there is positive reinvestment, they will eventually become poor. Inner cities and inner and outer suburbs all over the United Kingdom are classic examples of this group. At the bottom are the 20 per cent of neighbourhoods that comprise both private and social housing in decline; these are “collapsing” due to the weight of social and physical problems, and a lack of adequate reinvestment.

Self-regenerating neighbourhoods continue to be nice places to live. They require a high level of services, some of which are paid for by the rest of the city, including the constant in-migration of cheap



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labour, dependent on the collapsing neighbourhoods for low-cost housing, schools and cheap retail. Self-regenerating neighbourhoods also rely on the “free” wider infrastructure of the city, including roads, transport links, parks and so on. West London has twice the number of parks of East London, for example, and West London parks are always supervised, while East London parks are not. Self-regenerating neighbourhoods consume quite vast resources, particularly in the size of the homes and the space around them. Because they drive the power and wealth creation of the city, they are vital and by tacit agreement we support them.

Yet in Jared Diamond’s book *Collapse: How Societies Choose to Fail or Survive* (2005), he talks about a false elite that gets too far removed from the rest of society and is one of the major drivers of collapse. Our cities are potentially extremely divided and we should be aware of the dangers of allowing self-regenerating neighbourhoods to become too remote from the rest of the city.

In wear-and-tear neighbourhoods, 70 per cent of people own their own homes and their own cars, and they depend on and drive the standards of service in their areas. But they often move in search of more space and a better quality of life, and so they inadvertently become the “sprawl promoters”. The incentives for them to stay and renew their homes are few. There was a brief period between 1972 and 1978 when generous improvement grants enabled “wear-and-tear” areas to recover quickly, but then the improvement grants stopped and there have been no major re-investment programmes since for average areas. In addition, there are disincentives such as the 17.5 per cent tax (VAT) on all repair and renovation, the fact that urban services such as schools are poorer quality, and urban costs such as transport are higher, as is urban crime. These areas create what I call “urban destructors”, named after the Graham Greene story, *The Destructors*, in which an occupied house is sawn away quietly, slowly and invisibly until it suddenly reaches a point of collapse. The wear-and-tear neighbourhoods are in danger of reaching this point, as working people seek better opportunities for their children, often further out of the city, as their neighbourhoods decline.

The third group, the areas that are already collapsing, in fact house our “urban saviours”. They house low-income workers, lone-parent families, migrants, minorities. They also house disproportionate numbers of people in real social difficulty. Concentrating problems in poor areas is a common solution to wider social problems, but it creates additional strains on already pressured communities. It is difficult

to know what else to do – high-value areas do not accept this social burden. Collapsing areas are thus the very areas that rescue the most needy casualties of city competition from destitution.

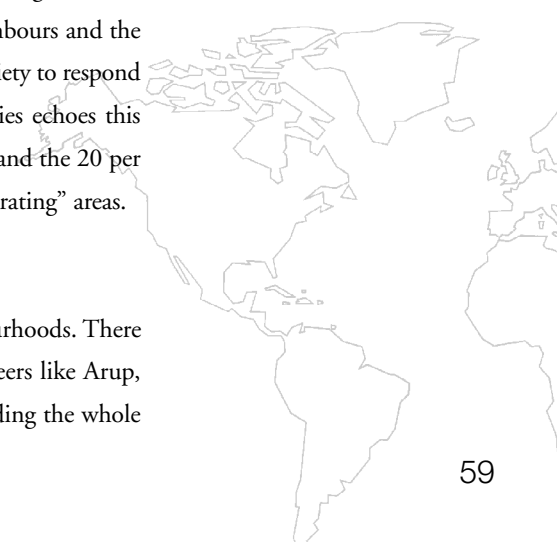
Collapsing neighbourhoods depend heavily on public services, which they also help provide. They are used by the wider city as a “dump” for the problems it does not want and as a resource for the workers it does want. These areas often have deeply damaged environments. East London, for example, is covered with giant electric pylons; since the area was only housing the workers of the city when it was built up, burying the pylons was not considered necessary. The government has just announced that it cannot afford to bury the pylons in Thames Gateway, except for the Olympic site.

Poorer areas have negative impacts on the city while performing an invaluable service at the same time. The reinvestment costs to bring them up to a reasonable standard are way beyond the means of the people who live here. Yet in urban and house-building terms the costs are relatively modest compared with building a new home, somewhere between £10,000 and £50,000 (around \$20,000-100,000) for renovating and upgrading each home, far cheaper than building anew. But it is also more complex, because it is more difficult to work around people already resident in an area, and buildings already in place; this is one reason why demolition is often preferred. Yet we have no choice but to upgrade “collapsing neighbourhoods” in a crowded country that is short of affordable housing, and various government programmes reflect this ambition. However, the incentives are not there.

Jared Diamond identified five factors in the collapse of societies: environmental damage; climate change, related both to natural causes and to high energy use; hostile relations with neighbours and the generation of violence; diminishing support and increasing isolation; and the failure of society to respond to the problems. I would argue that our response to poorer neighbourhoods within cities echoes this threat. Perhaps we need to worry about the 70 per cent “wear-and-tear” neighbourhoods and the 20 per cent “collapsing” neighbourhoods, as opposed to the 10 per cent high-quality “self-regenerating” areas.

Transfer of environmental resources from new build to existing communities

In order to cut carbon use by 60 per cent we have to renew existing houses and neighbourhoods. There is agreement, among top architects like Norman Foster and Richard Rogers, and engineers like Arup, that energy saving in buildings is relatively easy to do. The estimated total cost of upgrading the whole



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stock of 22 million homes to “excellent” efficiency standards, is around £200 billion (\$380 billion), half the annual Treasury budget. Obviously such costs would have to be spread over many years, but it could be achieved over 30 years by diverting the Treasury’s indirect subsidy of £35,000 (\$65,000) to each new-build home. If the cost of the new infrastructure and the environmental impact of new homes was charged to the developers, as is increasingly being discussed, then that charge could upgrade three existing homes to high energy efficiency standards for every new home built. In order to fund the push in favour of existing communities, we must start charging the true costs of building on the urban edge. Land value multiplies manyfold through development, often by a factor of five to tenfold in low value areas, many thousandfold in parts of the southeast. The Urban Task Force, chaired by Richard Rogers, in 1999 recommended such a charge, and the proposals in the Barker Review for a “development” levy echo the need for an environmental and infrastructure charge.

Renewing existing homes and communities would increase the density of existing built-up areas, leading to social integration; reductions in land use, energy and transport; urban viability. It would maximize the value of the existing infrastructure, a huge cost saving; it would renew existing neighbourhoods by attracting new resources and renovating buildings while reducing energy use and waste; and it would revalue existing older property. This would in turn attract investors to small abandoned sites scattered liberally within existing neighbourhoods.

In London, where there is little choice and there is a major affordability crisis, density is increasing without too much effort. The Mayor of London has now asked all London boroughs to do capacity studies, not for the bigger sites which are well plotted, and of which there are hundreds, but for the sites of half an acre and below, where perhaps four or ten or even 20 flats could be built, and through which projected housing demand in London could more than be met. There are hundreds of thousands of these sites, offering the capacity to add all the extra homes we need within the existing urban frame.

All space is now contested. Whatever the faults of the current planning system, the need for planning is itself wedded to the idea of making a social compact about how we live together on a crowded island. The civilization of cities requires us to live together with some agreed norms, systems and exchanges that neither infringe other people’s freedom nor allow abuse and conflict to spill over. The contested spaces of cities actually work through managing proximity in a fast-changing and increasingly mobile globe. One of the

reasons why people spread out from cities, yet remain attached to them for work, culture, social life and economic growth, is the tension between freedom and constraint. It is one of the reasons why people still adhere to the idea of community. City communities require close, but “soft” as well as “hard”, management.

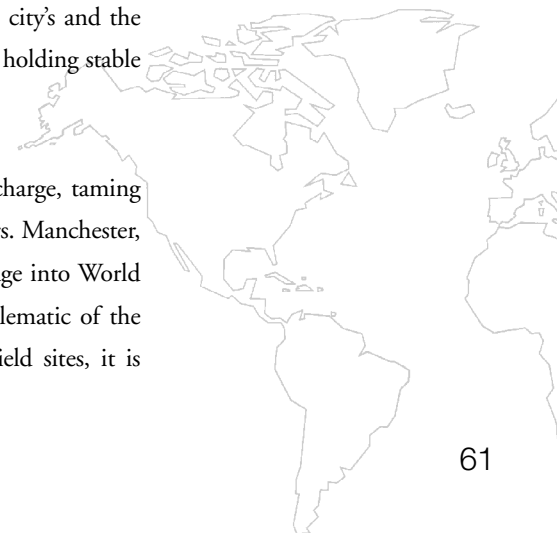
Can cities become sustainable?

There are some amazing examples of urban renewal. Barcelona won back its position as a thriving city through an open spaces plan – a kind of post-Franco gift to the people of Catalonia. The city authorities set about creating open spaces, however small, in 140 neighbourhoods throughout the most dense city in Europe, involving residents on the one hand and urban designers on the other. By 1984 they had created so many attractive neighbourhood spaces, with so much support from the citizens of Barcelona, that they were able to back a very persuasive bid for the Olympics. It is one of the few Olympic bids, if not the only one, that returned profitability and positive assets to the host city.

In Curitiba in Brazil, the authorities took a very distinctive approach, which has become a global model for urban transport and urban sustainability. The Mayor decided to turn main access roads to the centre into express bus-only routes, creating traffic-calmed pedestrian spaces in the centre. Cars would no longer be necessary, thanks to a complex local bus network linking all neighbourhoods with the main express bus routes. A unified bus fare ensured that the poorest people living in shanty towns on the edge of the city, often essential service workers, could get into the city for the same price as richer people living much nearer the centre. The environmental and social improvements in the city ran in parallel.

In Copenhagen, one-third of all people go to work by bike, and 25 per cent of the city's and the country's energy comes from windmills. The city has worked on this agenda for 25 years, holding stable the number of cars in the city and pushing up walking and biking.

Even London, for all its problems, has transformed its centre with the congestion charge, taming traffic, doubling the level of cycling, expanding bus ridership by 40 per cent over two years. Manchester, having been the urban pit of the country for many years, has turned its industrial heritage into World Heritage. But it also discovered that becoming the greenest city in the country is emblematic of the future. With the most intensely depleted inner city and the largest supply of brownfield sites, it is overtaking Birmingham as the leading core city in recovery.



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### An urban globe

At the moment natural capital is uncosted or undercosted as a result of poorer countries of the world selling their environmental capital too cheaply, so that European and American urban and suburban dwellers can consume it at a rate that far exceeds the planet's carrying capacity. The developed world will not survive the level of migration that will result from the unfair trading of natural capital between poor and rich countries. Professor Sir Partha Dasgupta of Cambridge University argues that we cannot continue to overconsume in the urbanized West the natural capital that belongs to all without unravelling social and environmental conditions across the world. For we all depend on sharing natural capital. Dire environmental consequences are forecast for poorer countries, that are already experiencing serious migration from environmentally stressed areas. Deforestation, soil depletion, drought and desertification are just some creeping indicators of this global disaster.

We do not protest at knocking down houses and using the old, baked bricks for underlaying roads; yet crunching up baked bricks for hard core is a tragic waste of the intense heat that went into producing those bricks and homes. Most of the bricks in our houses in the United Kingdom have hundreds of years of life in them. So we have to change the way we think about recycling and renewing. If we can recycle plastic bags, we can surely recycle homes. In an urban globe, it makes sense to reuse everything we can that we have already put into urban building.

Urbanization is continuing apace in any event; all attempts to prevent or slow the growth in the world's cities have failed. Therefore, recycling and renewing our cities is crucial, given the environmental impact of cities and their ultimate dependence on nature. We have a long way to go, but the intention is growing to put the urban environment to right for the sake of our social as well as physical survival.

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