

# Planning: the millennial prospect

Peter Hall

## Abstract

In the quarter century since 1975, though the environmental agenda has remained in the foreground, we have seen the arrival of a new set of concerns: above all globalisation, the spectacular deconstruction of the old manufacturing and goods-handling economy in many cities, and the arrival of a new knowledge economy and networked society. Our concern everywhere, in city after city, has been to regenerate decaying urban economies by injecting new activities. Left and right have disagreed about the precise remedy, but those disagreements are themselves now part of history: the old economy is largely gone, and no one expects its return. The problem is that the formal or modern sector is too often struggling to survive, and too often giving up the battle. It cannot compete, for multiple reasons: under-education, poor infrastructure, lack of credit and failure to access global markets. So we find cities that lack a formal economic base, cities in which the great majority of people live in informal slums and eke out an existence in the informal economy.

## BEPLANNING: MILLENNIUM-VOORUITSIGTE

Hoewel die omgewingsagenda in die vyf en twintig jaar na 1975 prioriteit geniet het, het 'n nuwe stel probleme opgeduik: bowe alles globalisering, die geweldige dekonstruksie van die ou vervaardigings- en goedere hanteringseconomie in baie stede, en die nuwe gemeenskap met nuut gevonde inligtingseconomie en -tegnologie. Ons grootste kommer is hoe om die talle vervalle stedelike ekonomieë waarmee ons te make het deur middel van nuwe aktiwiteit te heraktiveer. Links en regs verskil van mening oor wat die regte inspuiting sou wees, maar daardie verskille lê nou in die verlede; die ou ekonomie het grootliks verdwyn – almal weet dit. Die probleem is daarin geleë dat die formele of die moderne sektor heel dikwels sukkel om te oorleef en dikwels tou opgooi. Dit kan om verskeie redes nie kompeteer nie, as gevolg van swak skoling, swak infrastruktuur, 'n gebrek aan krediet en die ontoeganklikheid van die wêreldmarkte. Die gevolg is dat dié stede te kort skiet aan 'n formele ekonomiese basis waarvan die meeste inwoners in informele krotbuurtes woon terwyl hulle op 'n manier 'n bestaan probeer maak in die informele sektor.

In a paper such as this, one should look to the future. So it may sound eccentric, or even to reflect advanced age, to start by talking about the past. But in trying to forecast the future, there can be no greater mistake than ignoring the burden of history.

History is about where we have come from, forecasting is about where we are going to, and the two are connected along a single continuum. Forecasting is, or should be, about writing history backwards. There can be no better time to reflect on such elemental connections than on the millennium, and this paper comes

more than a year late for that purpose, millennial remarks may still be appropriate. So I propose first to go back briefly, and then to spend rather more time discussing the future.

## Looking back ...

I would not propose to go back a millennium, because the space is lacking to do justice to it, but I would like to plea for your indulgence, in going back a century. The prevailing *Zeitgeist* has powerfully affected the planning movement in the twentieth century, above all by perceptions of the major economic or social problems of the period (Hall 2000).

Around 1900, we had Ebenezer Howard's slim but momentous book, and Patrick Geddes was making himself heard. Housing was the great question of the day. The pioneers of the modern planning movement sought an answer to the problems of overcrowded urban slums. Their answer was central urban renewal at lower densities, plus new garden cities and garden suburbs on green fields. In its origin the 20<sup>th</sup> century planning movement was an outgrowth of the housing reform and land reform movement, and remained firmly coupled to it. Planned dispersion would rely heavily on the new technologies of electric power and low-cost public transport, above all the electric tramway. We can see that very strongly over the following quarter-century, down to and including the Regional Planning Association with their concept of the *Fourth Migration from city back to countryside*.

Around 1925, almost exactly a quarter-century later, the main developments were on the European mainland and were the brainchildren of the modernist movement in architecture. Le Corbusier in Paris, Ernst May in Frankfurt, Martin Wagner and Hugo Häring and Hans Scharoun and Walter Gropius in Berlin, designed bold new housing projects, even bolder new city sections, many of which actually got built. Henri Sellier in Paris was designing the first Paris *cités-jardins* and in Amsterdam H. P. Berlage was laying out the great Amsterdam South scheme.

All these schemes were essentially quite high-density, often with apartment blocks, planned as an integral part of the city and connected

---

Sir Peter Hall is a professor in the Bartlett School of Planning at the University College, London, and a Town and Country Planning Association Trustee. Sir Peter read the paper on the "International State of Planning" at a symposium held in Johannesburg from 22-23 November 2001 by the Association of Chartered Town Planners in South Africa (ACTPSA) with topic "Whither planning?"

to it by good public transport. They stemmed from a very distinct continental style of urban apartment living. But they had this in common with the British origins: they were essentially social housing schemes, and the link between housing and planning remained the key.

Come forward to the mid-century, 1950. The years after World War II saw a huge burst of planning activity, especially in Europe: the great strategic plans for London, Copenhagen, Stockholm and much later Paris. The motivation was comprehensive postwar reconstruction; effectively, it represented a continuation or completion of those earlier planning movements after the long delay of world depression and world war, now strongly associated with a wider social agenda: the building of the welfare state.

Fast-forward another quarter-century, to 1975. Now, we find a remarkable worldwide disjuncture: a change in *Zeitgeist* that coincided with the arrival of the postwar 'baby boomers' into political and public life. The activists of this generation effectively rejected many of the values of their parents: they saw comprehensive reconstruction and construction, large-scale development and auto mobility as positively bad, and their slogan, from E P Schumacher, was "small is beautiful". Protection of the environment was now the basic imperative; professional technocracies were seen as the enemy, and the demand was for bottom-up advocacy-style planning. Strangely, some of these themes accorded with a right-wing agenda, which dominated politics in many countries during the following decade; both were anti-government, though from quite different standpoints.

In the quarter century since 1975, though the environmental agenda has remained in the foreground, we have seen the arrival of a new set of

concerns: above all globalisation, the spectacular deconstruction of the old manufacturing and goods-handling economy in many cities, and the arrival of a new knowledge economy and networked society. Our concern everywhere, in city after city, has been to regenerate decaying urban economies by injecting new activities. Left and right have disagreed about the precise remedy, but those disagreements are themselves now part of history: the old economy is largely gone, and no one expects its return.

What we also see is that as a result of these changes, cities are polarised. The great majority has achieved relative affluence, though many have less security than their parents enjoyed; they have a stake in their homes and their own local environments. A critically important consequence is that, for the first time in the story, the link between housing and planning has been broken, even in Europe: housing policy is now about providing for an unfortunate residual minority, as it has been all along in the United States and South Africa, to a considerable degree in Australia.

Enough of this historical canter through the twentieth century; let me try to extract some general themes from it, which might serve as pointers for the job of prediction. Clearly a number of different forces were operating during the twentieth century, which affected the ways that western cities grew and changed. One, clearly, was demographic and social: the fall in birth rates, modified by short-lived baby booms; big migrant movements, especially from the developing world to the cities of the developed world; the fall in average household size.

Economic change played a major part too, particularly through deindustrialisation after 1970. Most basic of all was the impact of

technology. Suburbanisation depended first on the tram and the bus, then after World War Two on widespread car ownership; electrification and the spread of the telephone were equally significant, all acting as agents of deconcentration. The Internet is taking these processes further, continuing the work begun by the telephone.

Finally, as already discussed, there was the influence of ideas. They came from outside, and all of them reflected the prevailing *Zeitgeist*. In city after city, we see the influence of the city beautiful movement, the garden city movement, the strategic planning ideal, planning for sustainability and urban renaissance. In each case, as I have argued, these ideas were reactions to situations, to problem sets, that were perceived as important by planners and other urban policy-makers at the time. So it is very difficult to separate the ideas from the context.

### ... and looking forward

Can we now speculate on the impact of these forces in the century to come? As before, and also in the future, I will argue that we need to distinguish between general trends and specific manifestations.

In doing so, I want to present some key conclusions of the study *Urban Future 21*, commissioned by the German government and prepared for an international conference in Berlin last year (Hall & Pfeiffer 2000a 2000b). In it we sought to forecast the main directions of change in the urban economy, and in urban society, across the world. I propose to present them generally, but to point out what I think may be some particular points of relevance to the South African case – though I do so with trepidation, because my knowledge of having South African conditions is extremely superficial.

At the outset of our report, we point out that just after the millennium – in fact just about now – another great human milestone will be passed: for the first time in history, a majority of the world's six billion people will live in cities. Between 2000 and 2025, the world's urban population will double, to reach five billion; city-dwellers will rise from 47 per cent to over 61 per cent of the world's population.

But that is not all. Most of this explosive growth will occur in the cities of the developing world. There will be a doubling of the urban population, in the coming quarter century, in Latin America and the Caribbean, in Asia and in Africa together – above all in Africa. Even by 2015, the UN predict that there will be 358 "million cities", with one million or more people, no less than 153 will be in Asia. And there will be 27 "mega-cities", with ten million or more – 18 of them in Asia. It is here, in the exploding cities of some of the poorest countries of the world, that the central challenge lies.

A huge challenge, to be sure – but also a huge range of opportunities: opportunities for greater freedom above all for development, as people leave behind their traditional bondage to the land and the total dominance of the daily struggle for food. Urbanization, in fact, is a basic precondition for development. But it does not guarantee development. Managing urban growth for economic advance, reconciling it with managing ecologically sustainable forms of development and reducing social exclusion, will represent a key challenge for the new century.

Today we can already see the great transforming force of the century to come: it is the 'information revolution', which is already bringing cities together in complex global systems of interaction and interdependence. The key question is how we can shape technological advance

so that it liberates us and becomes accessible to all cities and its inhabitants.

Again, the challenge comes from the burgeoning cities of the developing world, where there is a paradox: people are still flooding into these cities, too many children are being born in those cities based on the hope for a better life: but too often they are being cheated. For urban growth has brought a sharp rise in urban poverty: according to UNFPA estimates, over one in four of the people in the cities of the developing world lives below official poverty lines, and that proportion rises to more than one in three in the Middle East and North Africa and to more than two in four in sub-Saharan Africa. And a large proportion of the poorest are women.

In these cities, the quality of the environment is not improving; in far too many cases, it is deteriorating. The problem is daunting. Many of these cities are already bigger than their equivalents in the developed world, and are projected to become yet larger. Most have only recently started on their development process. And, with some conspicuous exceptions, they lack the governmental structures and the administrative traditions to tackle the resulting problems. To be fair, they have achieved a great deal against overwhelming odds; and some have emerged as models for the rest of the world. But they are too few, and their example is not spreading fast enough.

What will the people of these cities want for themselves and their children? Surely, what people have wanted throughout history: satisfying work that yields freedom from poverty; life in a well-integrated society with stable networks of neighbours and friends; existing in ecological harmony with the natural environment; with adequate mobility to reach work, shops, schools, friends and recreation; acting as a citizen

within a political system that offers balanced representation of interests and values; enjoying adequate public services from sewers to schools, which provide for the basic needs of all the people in that city; and living in a built environment that preserves tradition but serves the needs of modern economic life and modern lifestyles. All these, we say, are dimensions of 'sustainable urban development'. To be called really sustainable, a city must score on all of them. Today, no city in the world can lay claim to such a title.

At the start of a new century, the demands of sustainable development represent a huge and daunting challenge. But there are grounds for optimism. First, the history of the last century has shown that technology can fundamentally alter patterns of urban life and work. Second, cities will continue to democratize their decision-making processes, making city governments more responsive. Third, there is a real prospect that population growth, the source of so many problems, will soon slow down, as the number of children per family will decrease. Fourth, we expect economic growth to continue, especially in the developing world, thus producing the needed resources. Fifth, in the developing world – at least for the next quarter century, and perhaps for longer – we will increasingly recognise the need to build on the strengths of the informal sector, incorporating it progressively into the mainstream economic world, thus including millions of poor urban people in the economic development process.

That last point is crucial. We want to argue now that there are, very crudely and simplistically, three different kinds of city in the world, with three different sets of key problems.

The first can be called the *city coping with informal hyper growth*. It is represented by many cities in

sub-Saharan Africa and in the Indian subcontinent, by the Moslem Middle East, and by some of the poorer cities of Latin America and the Caribbean. It is characterized by rapid population growth, both through migration and natural increase; an economy heavily dependent on the informal sector; very widespread poverty, with widespread informal housing areas; basic problems of the environment and of public health; and difficult issues of governance.

The second is the *city coping with dynamic growth*. It is the characteristic city of the middle-income rapidly developing world, represented by much of East Asia, Latin America and the Caribbean and the Middle East. Here, population growth is reducing, and some of these cities face the prospect of an ageing population. Economic growth continues rapidly, but with new challenges from other countries. Prosperity brings environmental problems.

We call our third type the *mature city coping with ageing*. This is the characteristic city of the advanced world of North America, Europe, Japan and parts of East Asia, and Australasia. It is characterized by stable or declining population, the challenge of ageing and of household fissioning, slow economic growth and adaptation, and social polarization. But it does have resources to tackle environmental problems, if it chooses. Its cities are characterized by very widespread dispersion and by reconcentration, leading to the growth of smaller cities and a challenge to the viability of the older central cities. Our description concentrates predominantly on the European type of mature ageing city.

Maybe, the city in the transitional economies of Eastern Europe and East Asia should be treated as a special fourth category. But it is difficult, because these cities are not

at all homogeneous: they differ hugely in their stage of development and in their recent economic history. So it is easier to include them under the three main categories.

However, I have a special problem with the South African city, apart from that small detail of having arrived yesterday, and that is that I suspect that – perhaps uniquely – it belongs to all three of these categories. That is, there are parts of South African cities, and there are specific population groups in South African cities, that belong to each of the three groups. Of course, to any urbanist, there is nothing particularly startling about this: it is what we have always called plural cities, and everyone has always accepted that African cities are plural cities. So, indeed, today, are London and New York and Los Angeles and Singapore – but in very different ways from what we find in South African cities.

What is different, I suspect, is the very big gulf that separates different parts of the South African city, nearly a decade after the end of apartheid, in terms of economic and social development and cultural assumptions. And that makes it uniquely difficult, I suspect, for planners to produce one-size-fits-all prescriptions. In our report, we develop two scenarios for each of these three kinds of city. First, we ask where the trends will take these cities, all three types of them, by the year 2025.

This 'trend' scenario assumes that there is no major new policy intervention, either at national or city level, to alter the underlying trends. Then, we pose the critical question: suppose governments act, more strongly but sensitively, to influence the driving forces and thus to deflect the trends? This is the 'bending the trend' scenario.

There is not the space to spell these scenarios out in detail, but I will try

to underline the key policy prescriptions for each kind of city: what they must do if they are to survive the challenges of the next century. Firstly ...

#### *The city coping with informal hyper growth*

In this kind of city, the key problem is that the urban economy fails to keep pace with the growth of the people. There are high birth rates – a product of sexual ignorance, superstition and above all poorly educated women. This plus continued migration from the countryside, produces a huge surplus of unskilled labour. They go into the only work they can find, in the informal economy: casual work and petty trading. This leaves them in dire poverty – especially the women and above all for female-headed households, which are more than 30% of the poor population. The problem is that the formal or modern sector is too often struggling to survive, and too often giving up the battle. It cannot compete, for multiple reasons: under-education, poor infrastructure, lack of credit and failure to access global markets. So we find cities that lack a formal economic base, cities in which the great majority of people live in informal slums and eke out an existence in the informal economy. They have little work and they live at the margin of existence, in places that lack the basics for a civilised life. They have no respect for the environment, because they cannot afford to do anything except struggle for survival. And they find it hard to contact worthwhile jobs, even if they had the skills, because they cannot reach them.

There is a solution to all this, though it may sound paradoxical. First, it is to get the birth rate down, which means education, above all education for the girls. We think that there is a tremendous role for information technology here, if we can get low

cost machines that do not need to depend on erratic mains electricity.

Then, it is progressively to formalise the informal economy. Cities can do this in various ways: strengthening relationships to the mainstream economy, both for inputs and outputs – for instance, through micro credit, providing building materials and food and water, and more effective transportation to help people access a wider range of jobs. They can achieve this best through communal self-help neighbourhood projects, backed up by informal levies to pay for materials, which can help overcome bottlenecks in basic infrastructure. Micro credit schemes, providing tiny loans so people can start their own businesses, will play a particularly crucial role.

#### *The city coping with dynamic growth*

In these cities there is some good news: the trend is for population growth to fall sharply, because of urbanisation, as people see that the costs of education and rearing children rise while the economic value of children goes down. And this has a further knock-on effect: there is a big rise in the number of working-age people relative to the young and the old, who have to be looked after.

This is not the end of the good news. In these cities, the great passage from the informal to the formal economy is well under way. Many of them are very attractive to inward investment, because they offer a well-educated and well-trained labour force at lower wages than in developed cities, and besides economic growth is generating big domestic markets for consumer durables like cars and refrigerators and personal computers. There is a sting in the tale there, though: this investment can always be diverted to even lower-cost countries and cities, as some Latin American cities are now finding to their cost. The key is to keep trading up into

more sophisticated levels of production, especially advanced services.

The main result of all this is that cities in this group all find themselves in a state of quite extraordinary dynamism but also of rapid transition. It often seems as if they are going through every stage of economic development at once. Or rather, different sections of their population are going through different stages. Side by side, in the downtown business districts you can see gleaming new high-rise office towers housing global corporations that provide advanced business services; along the arterial expressways, sleek suburban factories that are pouring out consumer goods; and, in between, wretched informal slum settlements where the people struggle to make a basic living by performing odd jobs or selling trinkets. These cities are simultaneously first world cities and third world cities.

One result is that they are highly polarised. Many of them, though not all, display extraordinary contrasts in wealth and poverty. A frightening sign is to see heavily gated and armed luxury apartment blocks or country-club type developments, next to wretched shacks. All too often, there are reports of escalating crime and violence. The poor, some of them, may find solace in drink or drugs, compounding the problem. Because the poor have to find somewhere to live, they often contribute to environmental disasters by building their homes on unstable hillsides or on floodplains, with results that are sometimes tragic. Even when they and their homes survive, they are often located far from job opportunities, with poor or non-existent bus services, compounded by traffic congestion.

The answer to these problems is to continue to push the economy in the direction first of advanced manufacturing and then of advanced services,

always keeping one step ahead of the global competition. Of course, cities cannot provide all the necessary policies on their own: nation states have to provide the right framework of macro-economic policies. But cities can do a lot, especially if they are given the right degree of administrative and fiscal autonomy – which many of them have been getting, already, during the last twenty years. Above all, they must and they can help their poorest citizens to join the mainstream economy and the mainstream society.

One important key is to help them formalise their housing: to use communal self-help to provide the necessary infrastructure, so that they begin to turn their informally built areas into middle-class suburbs. In countless Latin American cities, it has been happening and is still happening. In many eastern Asian cities, the approach has been different: the city itself has intervened to tear down informal settlements and provide high-quality housing, first for rent, later for sale. There is no one right way here; there are different paths towards the same goal.

It is the same with transport. Some Eastern Asian cities have deliberately encouraged high-density development which will support a top-quality metro system – and some, like Hong Kong and Singapore, had no choice because they had so little land. Some Latin American cities have made extraordinary innovations in operating bus systems to serve their more far-flung residential areas – and one of the most extraordinary of all, Curitiba in Brazil, has created a bus system that works like a metro, with local buses that feed into an express system travelling on its own tracks. But there is an interesting point: if one visits Singapore and Curitiba, the two cities look very alike, because both integrated their land use and transportation policies, encouraging high-density and high-rise

development along their main transportation corridors. Again, there is more than one way towards the same goal, but in the end the outcomes may be very similar.

It is no accident, perhaps, that Curitiba and Singapore are now two of the richest cities in this group of cities; in effect both have made the transition into the developed world, and both are technologically and organisationally among the world's most advanced cities. Last of all, we come to the kind of city that much of Johannesburg is, and London and New York and Paris and Tokyo and many of the world's greatest cities:

*The mature city coping with ageing*

The main problem of these cities is not the problem of either of the first two types. Basically, they have solved the big economic problem because they industrialised earlier and deindustrialised earlier. They are not advanced service cities, in which the great majority of people do not make things that you can drop on your toe. But this process has been far from painless. The deindustrialisation, which began about thirty years ago and is still continuing, has left far too many people without jobs and without much prospect of finding jobs.

That problem can only be met by education and then more education: above all, education for the sons and the daughters of that lost industrial labour force. But too often, it is failing to happen: these cities all tend to have concentrated islands of multiple deprivation, where entire families suffer from long-term unemployment that persists from one generation to another, and where local school systems just do not perform the necessary job of lifting the next generation out of this slough of despond.

We know that it will be a very complex job, demanding action on a

number of fronts: education, training, housing and social services. And we suspect that conventional answers, conventional policies, may prove counter-productive. American and British cities are pursuing welfare policies that actively encourage the unemployed back into the labour force. But it is far from easy: despite some successes, there seems to be a hard core of young unemployed who lack the basic skills, including the personal presentational skills, that you need to perform at all in the modern urban service economy. But it is above all a learning process.

This is important because no society should contemplate wasted lives like these. But it is not just that: the irony is that they are the precise equivalents of those people in the informal economy in those other kinds of cities, excluded from the mainstream economy and mainstream society. Sometimes this is because they belong to recent groups of migrants who have come in large and increasing numbers into American and European cities, especially because they are fleeing from local conflicts in the 1990s. These migrants, arriving suddenly and unexpectedly into highly-sophisticated urban economies for which they are ill-prepared, represent an emerging problem for cities in the 21<sup>st</sup> century, albeit by no means new: cities in 1990 experienced it, and the great-grandchildren of those migrants can testify that the problem can solve itself, with help.

More worrying is the fact that longer-established generations of urban residents may become marginalised, because they live in segregated and ghettoised communities, which are effectively cut off from the mainstream of urban economic and social life. This is the story of some Afro-Americans in cities like Chicago and Detroit, of some second- and third-generation Turks in German cities, of North African young men in the Paris

suburbs. They represent the extreme version of the general problem left by deindustrialisation.

The solution can only be education, education and yet more education. And here, as in the cities of the developing world, technology will have a major impact. Here is one prediction of which we can be sure: information technology, especially the internet and its successors, will transform the way we educate our young, creating in the process an entire new industry and a potent new source of economic growth. But the cities of the developed world share one other major problem. They are mature in more than one sense: they are cities of ageing people. People over 65 have increased from just under 8 per cent in 1950 to 13.5 per cent today and are expected to reach nearly 25 per cent by 2050; the most rapidly ageing countries – which include Germany, Italy and Japan will approach or exceed 40 per cent. We find it hard to forecast the effects on life in cities; we can only ask these questions:

- Will slower renewal of human capital reduce innovative potential?
- If so, how can urban systems stay flexible and innovative?
- In particular, could we use lifelong learning to overcome the ageing of knowledge?
- Could the family – the basic producer of care and personal services for elderly people through the centuries – be replaced by new associations (of elders), who take over the role of families as provider of services?
- How do societies deal with a rising burden of dependency, with fewer and fewer younger working people having to generate more and more wealth to support increasing numbers of pensioners? If past trends continue, in 2030, public spending on old age security in OECD

countries will be more than 16 per cent of GDP. How will these younger working people react politically to the growing social security taxes? How will they cope with the resulting reduced incentives to work, or with the possible flight of capital to other nations and other cities?

Ironically, one answer to these problems could be that mature cities will again have to open their doors to welcome a new generation of immigrants. As in the 1950s and 1960s, they will be ready to do the basic service jobs that an ageing population will need doing, especially in the labour-intensive caring professions. But that means paying for them. One crucial need, for all developed nations, will be to get the entire funding of pensions on a firmer contributory base; there is no time to waste here.

At the same time, these cities will have to constantly generate new wealth in the face of constant competition from the next-tier cities; the Singapore's and all the cities that will follow in their path. That means constant transition into ever-more advanced services, including especially services built upon the new information technologies, and services that improve the quality of life. There is an important moral here. Cities must try to enhance their own innovative potential. But they must also compete to attract inward investment. One way to do that is to offer an especially high quality of life. Some mature cities are already in the forefront here: in Europe, cities like Freiburg, Karlsruhe, Strasbourg,

Zurich, Bologna, Amsterdam, Copenhagen; in North America, cities like Portland (Oregon) and Toronto. But cities in the dynamic group of countries, like Singapore and Curitiba, are constantly offering competition, and their numbers will grow. So mature cities will need to keep a step ahead of the action. They have one overriding advantage: despite the process of diffusion, they still contain by far the largest part of the truly innovative firms using the most advanced technologies. That means that they can and should seek to develop these technologies and to apply them first in their own cities, as demonstration projects to the rest of the world. There is one challenge, in particular: to develop an environmentally benign successor to today's car.

In some European countries, it is surely significant that the Green movement have recognised that the car is a liberating agent as well as an environmental problem, and that the task is to develop as soon as possible its non-polluting successor, call it the eocar. It would have two key features. It would be powered by zero- or minimal-emission fuel: most probably a fuel cell, but possibly electric power picked up by induction from the street, and possibly dual-mode. And it would depend to a very great degree on sophisticated electronic technology to control it, so that – at least on city streets and freeways – it would have many of the characteristics of the automated vehicles we encounter in airports and in some urban transit systems like the London Docklands Light Rail. European, American and Japanese companies are now in a race to

produce it: cities like Stuttgart, Detroit and Hiroshima should be preparing to make themselves demonstration cities for the new technology, living illustrations of the urban world to come.

There is no specific prescription for this. There may well be different technologies. There is certainly more than one recipe for building attractive cities that can offer their people the good life. As John Maynard Keynes so brilliantly forecast seventy years ago, more and more, as cities overcome their most pressing economic problems, their quality of life will become a critical issue.

In Europe, we have been experimenting in this art for two and a half thousand years, with some modest success: consider Florence, Paris, Amsterdam, Munich and London. But we do not claim a monopoly, and newer cities too can join in this particular form of global competition. The mature cities should lead the way in the process that Aristotle so well described long ago: we come into cities to live, we remain to live the good life.

## References

- HALL, P. 2000. The Centenary of Modern Planning. In: Freestone, R. (ed.). *Urban planning in a changing world: the twentieth century experience*, 20 – 39. London: Spon.
- HALL, P. & U. PFEIFFER. 2000a. *Urban 21: World report on the Urban Future 21*. Berlin: Federal Ministry of Transport, Building and Housing.
- HALL, P. & U. PFEIFFER. 2000b. *Urban Future 21: A global agenda for twenty-first century cities*. London: Spon.