

Over the past five years Nicholas Falk has visited many cities, often to take part in conferences or other events, and has generally produced a short essay accompanied by a selection of around ten images. These have now been compiled together, and some will reappear in a new book on how cities can change direction and make themselves more sustainable. We welcome any comments or corrections, and hope this report will encourage further visits to some of the most interesting towns and cities.

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UNITED KINGDOM

King's Cross 05/14 – Transforming a rail gateway

Having spent time as a schoolboy watching steam trains 'streak' out of Kings Cross Station, the transformation is truly impressive. Cubitt's simple station building is no longer black, but has been revealed in all its splendour. It has been matched by John McAslan's graceful new concourse, which deserves wider recognition as an architectural icon. The fine restoration of the Parcel Yard as a Fuller's pub restaurant has broadened the choice of good places to eat, which include more than just the usual names. Outside the new King's Square is proving popular, along with other public spaces along the 'boulevard' which stretches up to the Granary, now the home of Central St Martin and the University of the Arts. Across Pancras Road, St Pancras International is now London's gateway to Europe, and again old and new have been fused together. The whole area is experiencing a long overdue regeneration from its sleazy past. The case for weaving together the two sides is very strong.

Crossing the main road

But crossing the Euston Road which runs past London's principal stations is another matter. Breathing some of the city's most polluted air, made worse by the continual running of taxi's engines, the pedestrian (or cyclist) faces complete disorder. Narrow refuges and oddly timed traffic signals trap you in pens that no sheep would stomach. A cacophony of signs fail to point out the main attractions, which include the new concert hall and galleries at Kings Place, the Wellcome Museum, and the British Library, let alone point the way to London's main hotel quarter in Bloomsbury, with some 10,000 beds. At any point, crossing is perilous, as traffic comes from all sides, for this is London's Inner Ring Road leading on to the A40. It is also where a major North South route crosses the main East West route, leading from Grays Inn or Farringdon Roads into the appropriately named York Way or Caledonian Road. An extensive gyratory has made most of the surrounding roads one way, causing the traffic to move in short jerks. Fortunately go a little further and the surrounding neighbourhoods are havens of quiet, including Cromer Street where we now live.

It seems scandalous that over £1000 million of public funds could be spent on doing up the two stations without doing anything to make crossing the road easier. Indeed months of inexplicable work on the narrow underpass have put one its staircases out of use. The relatively new exit from the Victoria Line at King's Cross to an area named as 'Regents Canal' involves a long circuitous walk without any relief, which is hardly compensated for by the delights of the new Northern entrance. Yet this is an area where thousands more are expected to work when the Crick Institute (cancer research) and the Google HQ open up. The problems can only grow if High Speed 2 were ever to descend on Euston, as proposed.

Upgrading stations

The contrast with other competing cities is only too obvious. In Berlin the new Hautbahnhof was built at half the cost as the centrepiece of a major regeneration area. In Paris, the development of Paris Rive Gauche, with some three times the space being provided on the old railway lands at King's Cross, has involved covering over the railway tracks leading to the Gare de l'Austerlitz that cut a poor residential area off from the River Seine. In Brussels trams, metro lines and a covered taxi rank get you to your destination. In Strasbourg, a grassy square outside the main station covers the traffic below. In Vienna, shops line the many underpasses under the main roads.

However perhaps an end is now in sight? Transport for London are making improvements a priority to be completed before the end of Boris Johnson's term of office. Camden Council would like to see the whole of the Euston Road turned into the Boulevard that Sir Terry Farrell has proposed. And a workshop that drew urban practitioners and designers together came up with a long list of improvements that could be made in the short-term while planning for the replacement of the gyratory gets going. But will the planners and politicians have the courage not only to spend some real money on making it easier and safe to walk and cycle, but also to face up to the much stronger lobbies of motorists, taxis, and delivery vehicles who currently make King's Cross a place to avoid if you can.

Welwyn 05/15 - Reviving garden cities

Visiting Welwyn Garden City to give the annual lecture to an audience from the WGC Heritage Trust and the WGC Society brought out the key question of what makes a Garden City distinctive. As the place where Sir Ebenezer Howard and Frederick Osborne both lived, not far from their architect planner Louis de Soissons, Welwyn Garden City is celebrated round the world for its pioneering role. It went far further than the philanthropic projects illustrated in an excellent booklet published for the Heritage Trust by a Hungarian enthusiast, to show how communities could realise utopian visions through acquiring and developing large areas of land to a set of principles. The early buildings in and around the Daily Mail Ideal Home demonstration project are truly inspiring. The grand boulevard from the railway station, capped by a fountain, creates a sense of arriving in a real city. Yet as I was driven around and talked to older residents, I was left with some doubts about how whether the original Garden City ideals were being displaced by what some call 'greenwash'.

Healthier town

As the bas relief that greets the visitor at the railway station points out, Howard was above all trying to create a healthy alternative to the smoke filled industrial city. People were dying early over a century ago because of the quality of the air and water. Today people no longer flock to leave London to get clean air. But we are far more sedentary and many are now dying from poor lifestyles, such as diabetes caused by junk food. Neighbourhoods are now dominated by large supermarkets such as Morrisons, and indeed the main employer in the town is Tescos, with its headquarters employing over 3,000 staff. People drive to stock up, and there are few butchers, bakers, greengrocers and fishmongers left to offer the older a choice and have a friendly chat with the ageing population.

Many who still work will drive or go to the station, where a half hourly electric train takes you quickly to Kings Cross (except mine was halted by a fatality in Gasworks Tunnel and I had to walk to the nearest Underground station!). But despite some cycle paths, I saw no one on a bike, not even the children returning from school. If Howard's vision is to be sustained, surely Welwyn and its neighbouring town of Hatfield should be taking a leaf out of Dutch or Scandinavian cities, and giving people on foot or bike predominance over those in cars?

There is no shortage of space in the wide tree-lined avenues that encourage cars to speed, and the roadway could readily be reallocated. A successful policy for healthier living could reduce the pressures for converting front gardens into car parks. Measures such as car sharing and car clubs could reinforce the sense of community that once made the town special. Parking charges could provide the income needed to maintain a higher level of services that a Garden City should demand. They would also encourage greater use of public transport. Incidentally the bus station that stood in front of the railway station was replaced by a shopping centre, another example of how the car has taken predominance in British New Towns.

Community engagement

Welwyn was built by pioneers, and places like the Barn, which puts on a lively cultural programme, symbolise the idea of people doing things for themselves. But I was told that there has been a decline in both audiences and people wanting to perform; the bar is no longer packed with families at weekends. The Welwyn Heritage Trust was bidding for lottery funding for another 12 month project, this time on how people used to play. Certainly, the town is large enough to support most people's interests or hobbies, yet small enough, with

50,000 residents, for people to know each other and have local friends. It should be an ideal 'Transition Town', but as Councillors are largely Conservative, pioneers may feel isolated.

Howard's vision of the Social City, with active communities that complement each other and are connected by municipal tramways, remains a dream. People do go to St Albans for 'something different', while residents of Letchworth visit Welwyn for the John Lewis store, but on the whole people are as isolated as anywhere. But in a town that once boasted the offices of IBM IT should be used to help people make new connections as well as to understand their special heritage. Working with young people is a good start. But in a time of austerity, and with so many retired and highly skilled residents, there are surely great opportunities to put Howard's into practice, and bring the Garden City ideals up to date?

A working place

If Welwyn becomes a dormitory for London, what happens to its old industrial areas is key. Fortunately the front of the old Nabisco Shredded Wheat factory that was once to have been a Tescos is to be saved. A boutique hotel is proposed for the old grain silos that are to be retained as the building is cut back to its 1920s splendour. There will also be much needed new housing. But next door the old goods yard and railway sidings, which are large enough to accommodate an innovative new 'garden city' community, stands sterile as the owners wait for values to rise even further. The Council is under pressure to release more land to meet housing demand, and a former quarry just over the town's boundary may help.

In a County once associated with innovation, and in a town that took in many Kinder Children during the last World War, the spirit of enterprise should still be alive. Visitors to Freiburg, I was told, came back despondent that what they saw could not be applied back home. There was an idea that somehow the German government was much more benevolent in backing local light rail or energy systems that have given Germany the leading role in the 'Green Economy'. The truth, as I tried to explain, is the simple ABC of Ambition, plus Brokerage, and backed up with Continuity.

The 'unearned increment'

The reason for the better quality of life to be found in Continental towns is that they put into practice what Howard and his followers preached. Instead of cities being dependant on a remote central government, they take over land needed for expansion, and then plough the uplift in land values back into better local infrastructure. Alas, Welwyn lost out when its designation as one of the first post-war New Towns resulted in control being transferred first to a Development Corporation and then to central government, which then sold off all its industrial and retail assets. So there is no legacy to maintain the extensive public realm, or fund improvements unlike Letchworth, or Milton Keynes with its parks trust. The new village at nearby Shenley in Hertsmere could provide a model, where following my original study, a property endowed trust was set up to create a park and look after a green strip round the edges that stops further incursions into the treasured Green Belt.

Despite the packed hall, members of the audience regretted that so few Councillors had bothered to come to listen to me and the Chair for the event, David Lock, who has just joined the Board of the development corporation for Ebbsfleet garden city. But now that Hertfordshire local authorities are starting to work together it should be possible to rekindle the garden city spirit and ethos that David Rudlin and I sought to capture in our proposals for Uxcester Garden City. The majority of the audience seemed to support the idea of local bonds to invest in building new homes for a return of some 5%, instead of simply renting out existing homes to supplement their pensions. I hope Welwyn uses its upcoming centenary like Bournville or the Joseph Rowntree Foundation to launch another settlement, and the time to start is now!

Covent Garden 05/15 – Learning from London's first regeneration area

URBED's 40th anniversary was celebrated in a stylish meeting place in Dryden Street in the heart of London, close to where the company was set up. The 100 acre area has clearly been transformed. Streets and restaurants now throng with tourists, and everywhere seems full. What were once workplaces for small creative firms such as architects have been converted into luxury apartments. London is enjoying a boom as a World City. Yet four decades ago its population was falling, and attracting investment was very hard. So how has the area's regeneration been achieved, was it a good thing, and what lessons can be drawn?

As URBED's original founder, and with backing from David Sainsbury's Gatsby Foundation, Nicholas Falk started in a floor of a warehouse rented out by local entrepreneur Christina Smith. A few colleagues could also see the potential for applying fresh thinking on 'adaptive reuse', by enabling small enterprises to fill the gaps left by the collapse of larger companies. After the fruit and vegetable markets moved south of the river, the old buildings were acquired by the Greater London Council. Community opposition stopped the original proposals for new roads and a conference centre etc, helped by the Government who listed some 270 buildings as well as designating Conservation Areas.

Neighbourhood planning (and development)

In a novel move the GLC, initially with the two boroughs of Camden and Westminster, established the Covent Garden Planning Team, who also managed the development of key buildings. Deputy team leader, surveyor Tim Wacher, recalled a desolate time when there were no private funds for major property investment. But this enabled creative people like architects to take over buildings. They took out clients for drinks or lunch and sparked the growth of a new evening economy to back up the many theatres.

This process of balanced incremental development chimed with the refurbishment philosophy of the Covent Garden Action Area Plan (1978). Community gardens took over derelict sites, and provided space for festivals. A very active community association helped shape a new comprehensive plan, and Covent Garden's location on the Piccadilly Line made it effectively the first Transport Development Area. The only way shops could be attracted to take over the limited ground floor premises in the Central Market Building was to ensure they provided what no others did. The Covent Garden Area Trust acquired buildings for a nominal rent that are let as market spaces, and help fund community facilities.

URBED's contribution

As part of URBED's philosophy of combining research with pioneering projects, we organised the exhibition *Covent Garden Can Make It* in 1976. A 'Space Exchange' in a series of offices helped businesses get and sublet small spaces. We also started the first UK programmes to train and support entrepreneurs. URBED used action research to influence government policy, for example through my Fabian Pamphlet *Think Small: Enterprise and the Economy*. We encouraged embryonic developers such as Gillian Harwood and Eric Reynolds by sharing experience through conferences. Licences on 'easy in easy out' terms were the key to what later became 'big business' through companies such as Regus and belatedly WeWork. The architectural practice of Rock Townsend developed 5 Dryden Street as a working community, where young architects like Alan Stones got a break. But as demand and rental values rose, so we and other pioneers had to move out.

John Worthington, co-founder of architects and space planners DEGW, recalled the research programme into *Reusing Redundant Buildings for Small Enterprise* first published in the Architects Journal. This showed how the shapes of buildings determined their uses, and how an incremental approach could bring problem buildings back into use, and was later republished as a book URBED produced the first good practice guide for the Department of the Environment on *Reusing Redundant Buildings*.in 1987.

Regeneration through heritage

City and cultural expert Charles Landry, who was running Comedia at the time, gave a keynote presentation with a stimulating set of images. He said URBED has moved from the rearguard to the vanguard of a creative movement to adapt old buildings to new uses. The idea of heritage having value has taken off around the world, and Covent Garden has become iconic. Heritage and creativity go together, and while creativity is renewable, heritage is not. New ideas flourish in old places that are flexible and easy to adapt, and these areas then become popular places to visit, and values escalate.

Creative enterprise

Concern was expressed about whether the community lost out. 40 years ago it comprised some 3,000 households and 30,000 workers in 1500 firms. Norman Beddington pointed out that the GLC achieved its housing objectives thanks to taking over properties and funding development, as planning alone would have been too weak to achieve balanced growth. Ronnie Lessem, an initial director, recalled some eight or nine clusters that traded with each other, and, for example, the timber yard provided the wood for scenery, while costumiers and sword makers worked for the Royal Opera House. Covent Garden was truly a creative quarter at that time, and URBED saw how the 'knowledge economy' could be as a force for regeneration. His work on Linking the College with the Community has taken off in Commonwealth countries, but was ahead of its time in the UK.

Bradford's Little Germany Quarter 05/15 – Maintaining the momentum of regeneration

We revisited Bradford's historic 'Merchant Quarter' some 30 years after URBED first came up with a strategy for the area's regeneration. Walking around I was struck by the importance of getting the timing right, and of funding ongoing management. Of course, as David Rudlin's pictures showed at another event to celebrate URBED's 40th anniversery, the area has been physically saved. But has it been regenerated?

Sleeping beauty

In an area of some 20 acres, there is over a million square feet of space, largely warehouses built to sell woollen goods. Half of the space and a third of the buildings are currently empty according to Dave West, who after 25 years working for the Council has set up a social enterprise to promote the area's revival. He lives in a home in the area that is worth less than what he paid for it in 2001. For despite some imaginative conversions and new build schemes Little Germany has not taken off as the creative place to live that we imagined. Nor does it hum with bars, restaurants and galleries.

The reasons lie, as Marc Cole explained, in the failure of Bradford to resolve the wider problems of its city centre – (although there are now real signs of improvement). These include a divided community that does not properly 'own' its centre, grand schemes such as the Alsop Masterplan that could never be implemented and delays in the Westfield Shopping Centre which was just a hole in the ground for ten years. Progress has been made, and the success of the Mirror Pool in City Park – the one positive legacy of the Alsop plan – has been a major boost for the city as will be the completion of the Westfield Centre later this year. However too much time has been spent fighting battles such as the demolition of the Odeon and too much emphasis put on the apartment market which provided only average quality homes and very little supporting infrastructure. The city has not made the most of the fact that it has some of the best Asian restaurants in the country preferring to brand its Curry Mile the 'World Mile' to downplay its Asian connections. The City that was once at the heart of the Leeds/Bradford conurbation but is now over-shadowed by Leeds, and feels like another world waiting to be discovered.

Bradford has been the subject of many forms of regeneration, most recently the Urban Regeneration Company. However rather than embracing the resources that a URC brought to the city, as other cities have done, Bradford spent its time complaining about its imposition. We always say that regeneration takes a generation but Bradford is now on to its third generation of regeneration professions and still it resists.

Little Germany Action

Our original strategy was very concise. It sought to change the area's image by creating a temporary new square which then was the site of Bradford's first community festival. The festival grew to become the largest in the country at a time in the late 1980s following the opening of the National Media Museum when Bradford as seen as a success story, which was why David Rudlin accepted the job of managing Little Germany Action. As Dusty Rhodes pointed out, this success was the result of a city that harnessing the energy of its thousands of creative people. Dave West thought the best times were when URBED was involved, which included the delivery of Festival Square, Merchant's House, the Bradford Design Exchange, environmental improvements, sculpture competitions and scores of events. In the mid 1990s the area was promoted as an Urban Village and by the end of the decade the occupancy levels of Little Germany had been double and some £15 million had

been invested. Today, unfortunately the occupancy levels are back to the levels in the late 1980s and despite all the hard work and investment the area does not deliver its potential.

As Councillor Simon Cooke noted most of the investment depended on public money which is now in very short supply. While Dave West's work on ongoing regeneration is to be welcomed, he needs resources. There are a range of possible models, as Kate Dickson showed, from Birmingham's Jewellery Quarter, where people still work, or Nottingham's Lace Market which buzzes at night, to European models that attract families into old industrial quarters. As Dusty said, the problem would have been solved in the 1980s if his offer to fill Little Germany with Bradford's creative's had been taken up. There remain plenty of energetic and creative people in the area. So what needs to be done next?

Dave West believes it is all about creating the 'right mix' – quality jobs, quality city living, the creative arts, supporting infrastructure and connectivity within the high quality environment of Little Germany – ie a living, working, lively special place – alive with pride and shared ownership. To achieve this requires effort, imagination and co-operation overarched with determination and consistency of approach. It can be done!

Nigel Grizzard, who helped start the original festival, put his finger on the problems for inaction:

'The reasons are many, but City Centre living in Bradford is not in vogue, as there are no jobs in the City Centre in the way you would find them in Leeds or Manchester – no architects, designers etc., so people live in the nearby suburbs where housing is good and relatively cheap eg Heaton. The only major regeneration building regeneration schemes in Bradford that have succeeded are Salts Mill, the adjacent New Mill and Victoria Mill all in Saltaire, this is because individuals drove them.'

The answer for Little Germany, as Dusty said, is bring in artists etc to get life back into Peckover Street where the Design Exchange is, reinvigorate the Design Exchange and Festival Square and buy out the landlords of the empty property who are the dead hands in the process.'

Towards a shared vision

With the opening of the giant Westfield shopping centre in Bradford's Broadway this Autumn, the physical hole will have been filled, and there is a once in a lifetime chance of attracting new interest in Little Germany next door. But without concerted action, the opportunity will be missed. There is a need for investment but also a little more imagination from the council (For example the artist who designed the beautiful new street signs in Little Germany had to put them up himself as they did not conform to the standard Council system). This is ironic given the seeming lack of signage to tell you where Little Germany is or what it offers.

How different from the history of a city like Leipzig in former East Germany which has a very similar history to Bradford. This city now competes with Berlin as Germany's creative centre thanks to low rents and artists taking over old textile mills. Or go to Roubaix, another old textile town next to Lille, which converted its old swimming baths into La Piscine, the most visited gallery apart from the Louvre, and where cultural life has taken off in ways that engage its largely immigrant population. I also was reminded of what has been achieved in the mills of the Stroud Valleys thanks to the original idea of a 'string of pearls', a growing number of festivals, and lots of creative entrepreneurs.

In the city of David Hockney, and with a very good university on the edge of the city centre, surely the empty spaces should once again display beautiful products or provide space to live and work? Little Germany's fine cobbled streets are ideal for making films or putting on plays, so why should Oxford be the only British city to feature in endless television crime

series? Bradford is the world's first Unesco City of Film – indeed the City of Film office is located in Little Germany. However, there is no shortage of 'to let' signs, and some of the owners must surely welcome 'meanwhile uses'? And there are plenty of people to train for a service economy that could benefit from a 'warm Yorkshire welcome', as well as the ability to produce and serve tasty food in exotic surroundings. So it looks as if a task force for Little Germany is needed to build on the achievement of launching the first Local Heritage Partnership. As well as visions and masterplans, which may gather dust, we need to mobilise local people who care about their heritage. We must ensure that old spaces do not just become museum pieces but help make a better world and bridge the gap between past and future.

Brighton's New England Quarter 07/15 – Creating masterplans that work as intended

A workshop in Brighton's New England Quarter provided the opportunity not just to look around what has been achieved, but also to meet some old friends, such as Pooran Desai, the founder of BioRegional, and Nigel Green, who was the planning officer with whom we worked. David Rudlin explained that the New England Quarter was not only URBED's first masterplan but also one of the few places to have been built out in its entirety. This was due in no small part because of the commitment of local developer Chris Gilbert of QED. The event provided a useful opportunity to assess what masterplanning can and cannot do and the lessons that can be learned from one of the most important development opportunities in the city.

Creating new public places

Pam Alexander, the last Chief Executive of SEEDA (the South East England Development Agency) drew on her rich career for a keynote presentation to show how urban policy had evolved over the last 40 years. She is now a non-executive director of Crest Nicholson, who played a key role as developers of One Brighton with BioRegional Quintain. She described how there is increasing reliance on the private sector to promote masterplans but that they require a degree of certainty plus flexibility if they are to invest on the scale required. Yet 55% of local authorities do not even have an adopted plan, small housebuilders have largely vanished, and too much reliance is being placed on deregulation and localism. When grant funding was available, few schemes in Brighton were taken up, so what has made the New England Quarter such a success?

Regenerating brownfield sites

The old Brighton Goods Yard, a 16 acre site in a tightly constrained Borough, closed in the 1960's and some five attempts to develop it had failed. The site is on a steep hill between the railway line and the London Road shopping centre. It serves as the station car park and Network Rail insisted that at least 160 parking spaces had to be available all times as it was being developed. It is also next to some dreary 60's offices, but quite close to the vibrant North Laines Conservation Area. Local community group Brighton Urban Development (BUD) initially requested URBED's involvement based on our work on Homes for Change in Hulme and the Sustainable Urban Neighbourhood. At almost the same time, Sainsbury's, whose scheme for a supermarket had been turned down at appeal, asked Nicholas Falk to look at some fresh proposals for putting the flats over the store.

David Rudlin's critique of the scheme led to URBED being asked to devise and eventually lead the masterplanning process (much to the consternation of BUD). Most masterplans are never built, and few have the flexibility to allow for a number of different developers. URBED's approach drew on the way cities have traditionally evolved over time through a series of 'rules' that shape the different land 'parcels' in terms of uses, densities, and above all relationship to the street. Planning started in 1998, consent was granted in in 2003 and construction started soon after.

The resulting development, which involved some ten different blocks and design teams, is remarkably like our original plan. This has not been easy and Chris Gilbert told the story of Plot J next to the station that was sold early on to generate cashflow but was then promoted as a tower by the Beetham Brothers. It is only recently that the site has been bought back by QED and the scheme on site by Hyde Housing, is much closer to the original masterplan. It

will at last allow the completion of the greenway and a direct pedestrian route from London Road to the Station.

Making development viable

Chris Gilbert doubted if the scheme could be done again because food stores are not as profitable as they once were. Funding from Sainsbury's was absolutely crucial for the infrastructure, which included a new road and a multi-storey car park before there was any return on the investment. Costs such as £800,000 for diverting 150 metres of fibre optic cable bring out some of the problems of redeveloping brownfield sites. Concern was expressed about the unaffordability of the housing. As Sheila Montford of the Brighton Society forcefully pointed out, the key problem for the UK is that housing is now quite unaffordable almost everywhere. This was partly due to 'buy to let' investors outbidding owner occupiers, while there is no longer funding for social housing. No national developer would have spent the time engaging with the local community, who were very hostile, or ensuring that the many construction problems were overcome.

Part of the area's distinctiveness is due to the involvement of small specialised developers. Bio Regional's original involvement was also at the behest of the community and led to them being given an 'informal option' on one of the plots allowing the most innovative part of the development to go ahead. The 'patient' approach shown by the original land owners, Network Rail, also helped, once trust had been built up. It was interesting how pressure from the community had forced the developers to be more innovative than they would otherwise have been and they have since become converts going on to produce some of the first low-cost housing made from containers in Brighton.

Engaging the local community

Articulate local people were originally strongly opposed to the scheme largely because it involved moving Sainsburys to a larger site. Their feeling was that they should be able to determine the use of the site and came up with several hundred ideas for what should go on the site. In fact many of their proposals were eventually incorporated into the scheme but it was regrettable how bad-tempered discussions became. Nigel Green, the strategic planner at the time, explained how the Council set up a working group of eleven stakeholders to produce a brief. This led to further objections, but did enable the Council to adopt a brief to which the masterplan responded.

A University of Westminster study found that development in the UK was much harder than in the rest of Europe due to the power of local groups and the adversarial nature of development. Questions were asked about the community that now lived on the site. Because of the language school there are many students living on the site. Perhaps too much time was spent on physical integration and not enough on social integration. However, it is heartening that residents have now set up the Friends of the Greenway group to take on maintenance. Significantly perhaps, the development of later plots attracted almost no comments according to the Head of Planning at Brighton and Hove Councils who was there to observe the discussion.

Achieving quality

The scheme is made up of contemporary mid-rise blocks, with many interesting views, thanks to the involvement of many different architects. A series of Design Codes has resulted in a variety of architectural approaches. The entrance to the Sainbury's is from a pedestrianised square, with places to meet. Cars are hidden away underground and there are just 15 parking disabled parking spaces for the 172 flats in the BioRegional scheme, so the development is one of the largest car free schemes in the UK. It can feel quite quiet,

though the food store generates life at all times. Public art, such as the 'ghost train' over the railway bridge seeks to interpret the site's history as a place where locomotives (and Pullman carriages) were once built. The spaces need better maintenance, though a Friends of the Greenway group is now helping look after it. QED handed over the site hoardings to some 120 local 'graffiti writers', which made it more interesting during the long construction period.

Acting as an exemplar

The Life Cycle Assessment report of the carbon savings in One Brighton found that they achieved a 60% reduction compared with conventional homes, which could go up to 78%. More could have been achieved if the biomass boiler had served a larger development (as URBED originally planned). BioRegional have been able to apply their ten One Planet Living principles in a prominent scheme which others have taken up. They are now working in fifteen different countries and influencing many billions of investment. One Brighton has been carefully evaluated, and there are many lessons for those trying to reduce energy consumption in new housing schemes. Design Council CABE was trying to carry on the role of sharing good practice, but no longer receives a government grant.

With so many senior people having left local authorities, unless it can be made much easier to secure higher quality standards, the potential for replicating the New England Quarter around other major railway stations may go unrealised. Hence URBED must continue to share the lessons as widely as possible. Clearly masterplans and development frameworks can help produce agreement on complex schemes that can only be implemented over several decades, and even raise quality standards. But if government seeks to cut red-tape in a ill-considered way without providing a means of providing upfront infrastructure, the prospects of replicating the New England Quarter look poor.

Birmingham 07/15 – Transforming city centres

Returning to Birmingham for the Academy of Urbanism Congress in 2015, where URBED sponsored a workshop on 'How to lose your ring road and find your city centre', I reflected on how to achieve urban change on a major scale. A city once known as the 'Workshop of the World', and then dominated by the car, has become one of the most popular places for holding large meetings. The changes to the traffic system have revitalised the life of its city centre and generated a food culture par excellence! We generally know what we dislike about a place, and even where we want to go. But the real issue is how do you get there from here?

The new vision

We got to know Birmingham in the 1980s when we set up an office there in the Jewellery Quarter. Concerns about the low quality of the city centre led to proposing a city centre symposium to come up with a fresh vision. Since 1988, when URBED helped Birmingham rethink its city centre through what we called *The Highbury Initiative*, the City Council has led the way in improving urban quality and wellbeing. There were several steps. First came the decision to drop the ring road at crucial places to allow the city to break out of the 'concrete collar', as it became known, and importantly remove pedestrian subways and bring people back up into the light. Second, came high quality pedestrianisation of the links between the new Convention Centre on the canals at Brindley Place, the civic centre, and railway station. Getting the buses out of Corporation Street due to the City's Leader Dick Knowles overriding the advice of the Council's officers transformed people's experience, In turn the improved environment made it viable to redevelop the outdated Bullring, as a modern shopping centre, with the London department store Selfridges commissioning a truly iconic building.

The city is now attracting people back to live in the City centre, as the Council's Leader at the time Sir Albert Bore pointed out in his keynote speech. The process has not only conserved historic areas like the Jewellery Quarter, but also opened up new quarters, with two of the city's universities playing a key role in both modernising an outdated campus and creating a new campus in the City Centre's Eastside . So a city that had lost its purpose is once again the strong heart of the Midlands. The Council was keen to see High Speed 2 with a new station alongside the original 1838 London and Birmingham Railway company station at Curzon Street. Though proud of what has been achieved, there is still a long way to go in upgrading city-wide urban quality and creating healthier places. The City's Medical Officer reminded the Congress. Birmingham is not yet 'world class', but is on its way.

Connected city

Peter Jones, Professor of Transport at UCL, suggested that cities go through a series of phases in improving their connectivity. These amount to 'step changes' as his diagram illustrated. New Street Station, and its disjointed link to the tram that goes through to Wolverhampton, currently presents the visitor with a poor first impression. The completion of the reincarnation of New Street Station plus the on-street metro will, should match the experience of Continental cities that Birmingham competes with. Cars still intrude in some areas, but the tide is turning. Furthermore, where once the canals were ignored or avoided, they now provide peaceful routes to and through the City Centre away from the traffic, and make cycling safer too.

Charles Montgomery drew on his book Happy City to argue that frequent entrances on streets, buildings and spaces lead to people walking more slowly, and interacting more, which makes them much happier. His research suggests that small things, such as places to

sit, can be equally important as grand projects. So there is still some way to go in ensuring that new buildings are not seen as individual projects, but should be considered holistically. Therefore urban design should lead large scale planning, and not be an afterthought.

Ambition Brokerage and Continuity

The overall lesson from our 40th anniversary workshop is that regeneration or renaissance starts with a city wanting to do much better, using inspiration from other places. Undoubtedly the kind of 'action planning' approach pioneered in the *Highbury Initiative* can give city leaders confidence in achieving culture shift, breaking with past policies, and adopting new values and priorities. But nothing would happen without the leadership to broker 'quality deals' so that opposition is quelled, and this is where the skills of the urbanist are most relevant. People believe what they see for themselves, which is why study tours can be so valuable, backed up by supportive local media.

But regeneration takes time, and continuity counts, as the examples of leading politicians such as the Leader Sir Albert Bore or officers such as the former Chief Economist Sandy Taylor reminded us. So while we should take inspiration from cities in many other countries, and Charles Landry offered a stimulating range of possible models, in the end we must find ways of rebuilding local capacity.

Manchester 05/13 – Making the most of a city's assets

A study tour by the TEN Group to Manchester learned how post-industrial cities can transform their centres. Manchester's city centre has undergone a renaissance over the last decade, and now compares well with many European cities. Bright yellow trams connect with the main suburbs, and out to Oldham and Rochdale (a project that was being considered in 2003/4 when URBED produced its *Oldham Beyond* vision). As a result there is now a much wider choice of places to live, including the exciting redevelopment at New Islington that you see on arriving into Manchester Piccadilly, close to the striking Commonwealth Stadium (since renamed the Etihad Stadium and home to Manchester City whose rise to prominence has matched that of its host city).

The redevelopment of the ugly Arndale Centre that took place following the IRA bomb in 1996 is a big draw, with pedestrianized streets that make London's Oxford Street look shabby. While the River Irwell does not quite compare with the Thames, Calatrava's great bridge, and hotels like the Lowry add a lot to the city's stylish image. Further on, Spinningfields provides a memorable new commercial and residential quarter, with a stunning Court complex to crown it all.

A lot has happened since the early days when URBED set up office in 1991 in a new housing development in Hulme. Much of the credit must go to the City's sustained leadership, and the way adjoining authorities have worked together in attracting investment. The latest success is the £61 million Graphene Institute being developed at Manchester University, and the City is set on becoming the main Technology Hub outside London.

But there is another side to the story. I visited URBED's Manchester office at a time when housing developments in the city had virtually halted and parts of the city centre are blighted by abandoned hulks of half built apartment schemes. Urban Splash who were a driving force, were struggling under their debts. Attention was turning to how to retrofit the existing housing stock (and work with Manchester's Carbon Coop to use the Green Deal's early funds is paying off in a big way). Since the 70s when I set URBED up, the challenge is still to make the most of what we have. Except this time instead of industrial buildings, it is the huge stock of inter-war semis and Victorian terraces in the suburbs and inner city that are crying out for attention, along with finding appropriate roles for failing shopping centres.

Mid Wales 05/16 - Revitalising small towns

Visiting the Centre for Alternative Technology for the first time, after a week holidaying in Wales, was a good opportunity to reflect on the progress that is being made in putting alternative ideas into action. I wanted to see how well town centres were faring, what is being done to build better homes, and how easy it was to travel around. URBED has advised many smaller Welsh towns on improving their centres, and I was keen to know whether lessons were being learned.

Travelling around

The old A40 main road from Gloucester through to Fishguard is a delightful way to travel, now the motorways have taken the main through traffic off the narrow roads. There are still occasional delays following a farm waggon, but in general the scenery is delightful, and so are the main towns. There are signs of gentrification in Monmouthshire near the border, but it was still quite easy to park in the town centres, most of which like Ross-on-Wye have been bypassed, or at least re-planned to give pedestrians priority.

Trains also run via Gloucester to Cardiff along the River Severn, and there are trains through to Fishguard several times a day. Narrow gauge stream trains puff up the valleys to Devils Bridge from Aberystwyth, and through to Llanfair from Welshpool. There are even plans to extend the short Corris Railway to link up with the Centre for Alternative Technology. But Wales has still got a long way to go to match the fares or frequencies available on the Continent, which is a pity as it would help tourism and reduce congestion and pollution.

A superb system of coastal paths, backed by the National Trust, has opened up areas that would have once been inaccessible. The beaches in the Pembrokeshire National Park are particularly delightful, and benefit from welcoming towns such as Newquay and the Lower Town in Fishguard. However, the requirement to translate everything into Welsh can make some signs confusing, and it helps to have a map reader with one. What is still amazing is finding beautiful places with almost no houses, and market towns that still fulfil some of their old functions.

Putting life back in smaller town centres

Steps have been taken in many towns to improve the environment, and the one-way system in Welshpool was quite impressive. What a pity though that carriage ways have not been narrowed, so traffic speeds through the High Street. There is little reason to stop because there is little choice of shops left. As in England, out of town superstores have drained the streets of vitality. Pubs and shops have closed. Intriguingly the station has been moved, and the Old Station has been converted very attractively into a kind of edge of town department store.

A few towns are undergoing an urban renaissance. Aberystwyth, which was voted Best Town by the Academy of Urbanism, combines a range of attractions for the tourists in the summer season with a lively university in the rest of the year. It is on the end of the railway line from Shrewsbury, but also has its own steam railway up to the hills and Devils Bridge.

There seemed to be relatively few charity shops, and few specialists. Instead there are now some much improved places to eat, and we had a superb lunch at the Angel in Abergavenny, which even boasts its own beer. The town hosts a lively food festival in September. The Royal Oak Hotel Welshpool has had a make-over, and is being promoted as part of a small chain of coaching inns. You can walk to Powis Castle from the town, but

each attraction operates in isolation. In the planned old port of Aberaeron, with its colourful Georgian houses, the Harbourmaster's Hotel has a superb restaurant. Wales has come a long way since the 1970s when I ate in what appeared to be the only fish and chip shop in Portmadoc, which closed at 8.00 pm, and clearly did not welcome foreigners!

Building better neighbourhoods

One of the best ways of revitalising town centres is to get more people living in them, but there were few signs of an urban renaissance. In Haverford West, which is delightful in many ways, I was told that Boots had gone 'out of town', and it seems that any edge of town site has been developed for retail rather than housing. Nor were there many solar panels or other indications of an invasion from outside, and perhaps the country seekers go for old farmhouses instead.

But at Machynlleth, for some 50 years a centre in an old slate quarry has been promoting and demonstrating alternative ideas as the Centre for Alternative Techonology. Reached by a short water powered cliff railway, the centre provides a pleasant place to wander around, especially if it is raining on the coast, with lots to see and touch. There are a few self-build houses, but many more people could live on the site. A large energy conscious building provides a wide range of courses that help to keep over a hundred people employed, and there is an excellent bookshop and café.

At some point there was interest in Wales in the idea of cooperatives, as in Mondragon in the Basque Country, and also garden villages. But it seemed as if experimentation was still down to a few individuals rather than being embraced by government. It was therefore a great and welcome surprise to cross the border into Bishops Castle and see what has been achieved over the last few years.

There too some shops have closed but others have opened. A town with less than 2,000 inhabitants used to boast of 40 shops and many still seem open. Two working breweries provide the pubs with extra attractions, and the community is extremely active. My last stop was at the impressive Wintles eco-housing scheme which is now almost complete. Some 35 houses have been built, all designed to minimise energy consumption. Delightful public spaces including allotments compensate for the lack of large gardens. The residents seem to have come from all over England, attracted by the sense of community as well as an environmentally friendly life in somewhere virtually unique.

Eco models

With an ageing population, many of whom have wealth tied up in their homes, as well as time to occupy, there is surely space for many more 'eco quarters' in which edge of town sites are developed for homes, not retail parks. The small town of Bishops Castle could provide a model, supplemented with expertise from the Centre for Alternative Technology. Wales has the potential to demonstrate a range of alternative ideas, for example wind power, but needs to go to scale. I was left hoping that some of the Welsh Councils would learn from what has been achieved around the Black Forest in Southern Germany in historic towns like Tubingen, or in former industrial areas around old industrial towns like Dortmund and Emscher Park, or in Spain around San Sebastian and Bilbao, and then work with CAT to create a much greener economy.

Hull 10/17 – creating a real 'city of culture'

Revisiting the fascinating city of Hull after many years to see Britain's City of Culture on a warm Autumn Saturday raised concerns about what culture really means, and whether our old industrial and port cities are taking the right steps. Having spent six days just a month earlier in Aarhus, this year's European City of Culture, which is a port city of similar size, I wondered what lessons might be transferred.

City of of the past

What hits the visitor to Hull, after the statue of Phillip Larkin rushing away, and a walk down the pedestrianised shopping street, is a most impressive collection of museums. Even the old Grammar School is open on Saturdays twice a month to see how we used to learn. The Wilberforce House presents a superb story of the abolition of slavery (though it was only though listening to a film you could learn that the slave owners were bought out several decades later (in 1833) for £20 million, a huge sum at the time.) There are collections of old transport, and 'street life', but without the noise and smells that conjure up 'life'. The main visitors seemed to be white and old, and few from London to judge from the those who got off the Hull Trains unit that saves you changing at Doncaster.

As well as the Museums Quarter, the highlights for me were the Fehrens Gallery, showing the Turner Prize candidates' works, and the memorable sculptures that form a kind of hall outside Hull Minster. It was also delightful to catch folk singers of modern sea shanties in the Maritime Museum, which boasts a wonderful display on whaling, including pictures by Turner on loan. So what could be missing from this array of culture?

Despite the signs everywhere of large shops closing down, I could see no evidence of contemporary artists at work. Spaces that might have been used for any one of the arts were closed, and gave a poor impression. Rough sleepers under one of the old department stores was one of the first sights to greet me on my walk from the station. The enthusiastic volunteers in the park handing out leaflets hardly compensate, though they were friendly and did suggest a street where it was possible to get something good to eat.

Whereas Aarhus has 50,000 students, many learning technical skills, Hull University has a third that number. It lost out to Lincolin, when its school of architecture moved, and significantly perhaps for a city that voted for Brexit, only draws 6% of its students from abroad, half the number of comparable universities in the UK. The Danes have invested in cultural buildings that combine learning with space for enterprise, and apply all the latest technology. Aarhus will soon open new tram line linking the centre with the vast university campus and new hospital on the edge. The railway station and main shopping centre are integrated, whereas Hull is evidently car based.

Housing the future

First impressions were not helped by the site of a derelict factory on the railway line into town. Indeed there seem to be no signs of anything being made, even though I had read beforehand about a new factory making wind turbines. For a city that wants to leave the European Union there seemed very few 'immigrants' on the streets. Perhaps this is because those who can afford it live outside the city? Paradoxically though Hull has long been a major port, the masses of Jews who came through the city in the 19th century travelled on (leaving behind the legend of the cry 'from Hull, Helland and Halifax good Lord deliver us', due to the way Elland was misheard!). As the museums explain, Hull has long suffered from poverty, with an amazing 40% of the pawn shops in Yorkshire in the 19th century.

The main investment over the last century or so seems to have gone into retailing. Major waterside sites, such as Princes Quay, had been developed as further shopping centres, and the limited catchment area has probably left Hull 'over-shopped'. Signs saying 'shop closing down' abound. There was nothing obvious to celebrate the new opportunities in wind energy now that Siemens is making turbine blades in Hull. A prominent site that in Aarhus would have been acquired by the City and developed as housing, has been developed as yet another kind of museum called 'The Deep'. Hull is full of impressive old blocks of architecture, but the new housing looked less appealing, perhaps because so much space is given over to surface level car parking with little shared space.

Living better

While there is a good bus service to neighbouring Beverley every 15 minutes that takes 40 minutes, I wondered about the quality of the local connections. Streets are flat, but finding one's way is confusing. Noone seems to cycle. There is a profusion of atmospheric pubs, but little in the way of obvious street life, certainly during the day. Hull has identified an 'Old Town', but seems to lack what Aarhus with a similar climate has named its 'Latin Quarter'. A city needs a critical mass or cluster of places to eat and drink, and for all the expensive repaving, it was not obvious where that place is. Though my fish at lunch came, I was assured, from a Hull fishmonger, it was not as good as I expected. With such low prices surely more Continental students would delight in taking the ferry over from Hamburg, and put some of the empty space to good use.

Conclusion

So if Hull is to survive Brexit, then surely it must make much more it its potential, as Scandinavian cities have done, and attract more young people to study and then stay. In turn this requires rekindling the spirit of enterprise that clearly characterised its former merchants and ship owners. Reckit and Colman, a former Quaker enterprise, are still based in the City and so I wondered whether innovative food preparation could be a way forward, as in some of the remoter Swedish cities I have visited.

As I left Hull Station, which is having an expensive makeover, I came across the Visitor Information Centre I should have noticed on my way in. There was no one around to say what platform I should take, or obvious information boards, but instead a cardboard placard around the neck of the fine new statue of Phillip Larkin suggested that Hull was happy to keep its secrets to itself.

Five English Cities 5/19 – Renewing old town centres

Having accepted an invitation to speak at an RICS conference panel on the future of city centres, I decided to check the state of five well-known post-industrial cities, where in two cases URBED has prepared plans for renewal a few decades ago. The scale of transformation in all cases was huge, and in some case innovative. But what shocked me was the amount of empty space in the heart of large ities. Here are my impressions.

Dunstable: a reconnected working town

Rising the five mile long guided Busway from Luton to Dunstable is a great experience. The buses come every seven minutes and connect the main station at Luton and the airport with the main hospital, ending in the historic town of Dunstable. The total cost was £91 million against a budgeted £51 million, but the cost of £7 million a kilometre for the 14 kilometres was only a quarter of what it might have cost to build a tramway to replace the old railway line.. Dunstable is a long linear market town on the A5, which lost its monastery five hundred years ago, and its large Bedford truck plant in 1992. The industrial area is now a base for Amazon, which I was told has brought hundred of foreign workers into the town.

Unsurprisingly just off the centre, there are now large Polish and Romanian food shops, as well as English supermarkets and a fine looking Wetherspoons. The green spaces look very welcoming. Trucks have been removed from the long High Street thanks to a new bypass which has enabled Houghton Regis to expand, but car traffic through the town is still busy. One visible improvement has been the widening of pavements and the removal of barriers so the town centre is now much more walkable.

I went there because I had been told the Council had waived rates as a measure to reoccupy empty shops. Alas there were still too few attractions except for a splendid Italian delicatessen and café. The model railway shop seemed to have given up. There were plenty of nail bars and beauticians, and there is a regular market. I tried to find out more but the Information Centre and heritage tea shop closed firmly at 4.30, and the person in the Town Council offices did not know anything.

Birmingham: a great Core city with distinct quarters

Leaving Birmingham's Grand Central Station for a conference of European regional planners, it seemed as if they had copied an airport, as it was quite confusing but with masses of shops. The conference was in Digbeth, which is where the Custard Factory has been turned into a collection of creative businesses. But there are still plenty of old workshops to remind one of the city's past role, as well as canals everywhere.

Back in 1988 when the city was no longer attracting retailers, the Council had invested in a Convention to turn the city into a national meeting place. I conceived the Highbury Initiative which drew planners from around the world to rethink the city centre. Instead of a centre dominated by cars we proposed dropping the ring road and promoting a series of quarters to connect the centre with the surrounding area. One direct result was the decision of Selfridges to open up in the redeveloped BullRing, and the centre is now a destination in its own right.

Wolverhampton: an accessible empty stage

The train from London terminates in Wolverhampton, or you can now get there by tram and bus. There is a fine new bus station, the railway station is being rebuilt, and the tram line is being extended up to it. Great visualisations of proposed new housing on the hoardings

show what is planned, and nearby is a fine mixed development that the City Council has undertaken to provide first class office space.

Everywhere it seemed buildings had been cleaned and restored, and the wide pavement had frequently been resurfaced well. The only problem was there no longer any shops on the main streets. I was told by a young person there was no longer any point in going into Wolverhampton as there were no shops, and Birmingham had a much better offer. At night the whole area is dead as only 200 people live in the centre, and there is no obvious concentration of places to eat or drink.

Referring to the plan we had helped produce more than three decades ago, it seemed that proposals for a Cultural Quarter and an Urban Village had never taken off. There are two large enclosed malls and the remaining multiples are to be found there. Specialist shops are not apparent, and you might think the public only wants to be tattooed or have its nails painted or hair cut. The Council plans to fully pedestrianise some streets, but I doubted whether that would bring the city centre back to life. The university has developed a large site on the other side of the railway line for some ugly student housing in tower blocks.

Wolverhampton seemed like an American city centre, with a hole in its middle. A lone AfroCaribbean trader selling second hand goods thought it would be better if he could get the right stock. But without more choice his prospects looked forlorn. There is a new market made out of containers, which perhaps draws people in, but which looked rather forbidding as it was all grey.

Canterbury: a historic stage set where the play has moved on

Travelling by bus in the Spring sunshine from the wonderful coastal town of Whitstable, with its excellent fish restaurants and specialist shops, the countryside looked as beautiful as ever.. There is an excellent Triangle bus service which enables residents to dispense with their cars, and which connects up with the relatively new shopping centre next to the bus station. But it was disappointing to find that almost all the shops seemed to have closed in the historic centre, many no doubt relocating to the new centre.

Walking around in the company of masses of foreign tourists I wondered what they made of this famous town, where there was little to eat or buy in the beautifully restored area around the Cathedral. A shop keeper with a great selection of old men's jactets, who is campaigning against a renewal of the Business Improvement District, told me the problem was the Rates, and that it was no longer worth running a small business.

The Cathedral is undergoing restoration, with a vast Heritage Lottery Grant, but I wondered if resources would not be better spent in encouraging people to live or set up business in the surrounding area. The University of Kent is not visible and it has always surprised me that a town with two railway stations and not far from London by fast train has not grown much larger. The Cathedral charges £12 to enter, and puts on a good programme of events, but that is not enough to keep a town alive.

An alternative future could be experienced at the old Goods Shed by Maidstone West station, which has been transformed into a marvellous Farmers Market with bars and a restaurant. It showed the potential for independent business to create something special if the space was available. No doubt the terms of the leases as well as the costs would discourage such a venture in the city centre. Surely we cannot allow digital retailing to kill off cities that have survived for hundreds of years, while trading is left to the few multiples that can afford to be in a new shopping centre.

Bristol a vibrant city buzzing with life

At the end of my week of discovery, I experienced one of the best centres I have been to, at least as attractive as any on the Continent. Yet only few decades ago, URBED was commissioned to help the Broadmead shopping centre deal with John Lewis closing down and moving to an out of town centre at Cribbs Causeway. The stylish entrance which David Rudlin devised is still prominent, and is connected up to the rest of the city centre by a stylish set of fountains in what was the old Tramway Centre. There was not an empty shop to be seen. It was hard to imagine that areas like St Pauls had once been the scene of riots.

Before taking the Ferryboat from Temple Mead Station, one of a hundred ideas that the public put forward when the city was in dire straits, I walked round Temple Quay North, an area that URBED has masterplanned some twenty years ago. What had been a wasteland is now a thriving missed use and high density quarter. Though only one of the towers we had proposed had been built (inspired by the original 'sugar cones, there is an attractive mix of styles and uses. The station is now a hub of activity, with fast buses to the airport on former railway lines that have been turned into busways.

The Ferry has many stops, and at each there are now stylish blocks of apartments, where once there had only been the SS Great Britain and Lloyds Bank.. Most exciting of all is Wapping Whatf, with its quirky shops and eating places, making use of old container.s. Because so many different developers and architects have been involved, the Floating Harbour is an amazing melange of styles, and as I walked back to the centre I recalled how the city had once been unable to attract investors until an enterprising individual managed to secure a rapprochement between the City Council and the business sector.

Narrow side streets full of independent shops, or former warehouses turned into bars and art centres suggested that Bristol had discovered the elixir of life, the secret of renewing old places. The process had been incremental, and started with the restoration of the environment. Activities drew people back into the centre. At the start a few adventurous and home-grown developers, like John Pontin at JT, led the way. Creative businesses followed such as Aardvark Animation. Though the idea of Bristol becoming Britain's Silicon Valley has not worked, I was told that many of the elements in Apple's Iphone were designed in Bristol , which benefits from being a centre for aerospace. Public investment in high quality design has certainly helped. Of course there is a downside, which is the escalation of house prices as people flock to move to Bristol to live.

EUROPE

Copenhagen 11/12 – Transforming a mid-sized city as the 'cycling capital of Europe'

URBED organised a study tour to Copenhagen and follow up conference in the Building Centre in London, to enable engineers and planners working in West London to see what Copenhagen has achieved, and to discover how elements can be replicated. Over the past couple of decades Copenhagen has not only won awards as one of Europe's greenest cities by reducing carbon emissions, but also is classed as one of the most attractive to visit. Even cycling in a strange city in the rain, after an excellent presentation by the City's Cycling Embassy, showed how reducing car use can transform everyone's experience of the city centre.

Much of the appeal stems from work by the City Council over many years to make the streets safe and attractive to walk and cycle. These apply many of the ideas put forward by Jan Gehl, Professor of Urban Design, whose consultancy practice is based in the City. He recommends treating a street as if you were a guest at a party. As well as many attractive waterfront areas, the city's main shopping street is pedestrianised for about a mile, with an attractive variety of treatments.

Cycling in 2012 accounted for 37% of trips to work in the city, and the goal is to raise that to 50%. Many residents own a number of bikes, which they use to reach the train, and trains and offices are designed to make cycling easy. What the group discovered was that almost all of Copenhagen's segregated cycle tracks and painted cycle lanes have been made on a politically approved project and budget. The last few years the annual budget has included a bicycle package of around 10 million Euros with a list of specific facilities in the city that has to be delivered. On top of this there are usually also other infrastructure investments that include bike facilities. For example, during the last 10 years, three cycling bridges have been financed. Much of the success is due to gradually removing parking spaces, at a rate of about 3% a year, and then passing the road space over to cyclists. This was the idea of a Polish city engineer who realised that 3% was enough to make a significant change over time, but not enough to stimulate a backlash!

In the dense part of the city and on the busy cycle routes the Danes prefer to build the segregated Copenhagen design with a raised kerb towards car traffic and also a raised kerb towards pedestrians. This design is of course more costly – but it is also much more effective in attracting cyclists. The philosophy is that you have to build cycle facilities, not just for existing cyclists, but for the not already convinced users. This is backed by the belief that the high perceived safety and comfort on a segregated solution will attract more users and be worth the money if the potential is there. On less busy routes the Danes sometimes introduce painted bike lanes such as in Artillerivej, a major road into the centre. Often these are on the list in the initial budget "bicycle package" and changed into segregated solutions within a few years. Whilst painted lanes work reasonably well, they do not really offer the comfort and safe-feeling that the more sensible bike-users are asking for.

Copenhagen suffered from industrial decline a few decades ago but is now rated as one of the best cities in which to live and work. Despite an often hostile climate this relatively small capital city attracts masses of visitors throughout the year

Estremadura and Madrid Spain 06/14 – Restoring confidence in old cities

Travelling from London to Barcelona by super-fast train offers a good opportunity to consider the relationship between investment in infrastructure and how well cities are doing. Thanks to the TGV, the trip took a little over nine hours, with changes in Paris and the Spanish borders, and offers a relaxing alternative to taking the plane. But it is also transforming provincial cities that were once considered poor relations of their capitals. Young people go to university and then stay on because the cities are cheaper, and offer a better quality of life. In turn this encourages knowledge based firms to expand in the provinces rather than feeling they have to be in the capital.

Ambitious Mayors get re-elected by producing changes everyone can see. So high quality public transit systems and pedestrianized streets and squares draw people into the historic centres, and boost the appeal of living there. Rising property prices in turn attracts private investment, and in due course the investment in public transport and the public realm is reimbursed from rising land values. The key, of course, lies in a taxation system that rewards public investment rather than private consumption. By giving cities more control over taxes, spatial inequalities have been reduced. In the process, jobs are created not just in local services, such as bars and restaurants, but also in the firms that make the equipment, and in ongoing maintenance.

Paradoxically Spain, which surveys show has some of the happiest people in Europe, also has one of the highest unemployment rates. Even in the poor and arid region of Estremadura there are few signs of an economic depression, except in the smaller and more remote towns where shops are vacant, and property is harder to sell. Funding for infrastructure projects has been slashed, with unfinished high speed lines to Portugal, and between France and Spain, where the local and regional authorities have other priorities. Today there are very few beggars or rough sleepers. A waiter in Madrid told me that the restaurant where he worked had taken on three fewer staff on the grounds the business no longer could afford them. Perhaps young people are simply spending more time at home with their parents?

Overall, in the forty years after Franco, Spanish cities have clearly recovered their ancient pride and vitality, and the resultant boost to wellbeing is tangible. Good wine and food are relatively inexpensive, and the weather helps. Furthermore, though debts may have been incurred, the well-patronised trains and renewable energy systems are a lasting investment, unlike buying expensive cars or ramping up house prices. By building housing at high densities around the historic centres, the disparities between rich and poor are being minimised. Perhaps if our cities embraced Continental lifestyles, we would share the benefits of the much maligned European Union?

Brussels 03/14 – Comparing transport projects with Copenhagen

The rare chance to meet Danish liveability guru Jan Gehl over dinner followed by a trip early next day to Brussels for a conference on regional connectivity raised the important issue of how to value and assess the options of improving walking and cycling versus investing in trams and subways. While they differ hugely in cost and impact, they do compete for space and resources, and have very different supporters. Copenhagen, branded as cycling city, boasts 37% of trips made by bike with a target of 50%. Achieved by cutting back on street parking, and gradually giving dedicated space over to cyclists, the result has been to give Copenhagen an international status as one of the most liveable cities, and a great place to visit as a tourist. Pedestrians and cyclists have priority everywhere, and roundabouts have given way to crossroads. But an indirect loser in Copenhagen has been public transport, with no trams, conventional buses, and one driverless metro line, soon to be joined by a second route. The residents do not just live in fine central apartments, but many more live further out, and bring their bikes in by suburban train, or leave them in bike parks at the stations.

Space for people and cars

With twice the population (1.2 million versus 600,000), and the role of European capital, Brussels has found it easier to fund new tram and metro lines, connecting with the European high speed rail network. Yet despite its renowned historic centre, it is strangely dull and lifeless compared with Copenhagen, and feels much more polarised. Bikes are rare, and unlike Stroget, the main mile long shopping street which is car free, cars still invade the city centre, and speed through on reserved roads.

The social and environmental contrasts seem greater, with shabby buildings no doubt earmarked for redevelopment contrasting with the well-cared for streets in Copenhagen, where a version of land value taxation deters speculation. The Scandinavians love to sit outside and chat, even in the cold winters, protected by blankets and heaters. In Brussels it seems to be only tourists who wanted to smoke that ventured to eat outside. As Jan Gehl puts it, we should not be looking at cycling as a form of transport but as part of the life of the city. Its value should not therefore be assessed in simple cost-benefit terms, but in the contribution it makes to urban vitality and living streets.

Cost benefit analysis

But this raises tricky questions about how to evaluate the options, in a world obsessed with quantification, and where politicians fight over budgets. The complexities of winning a case in the UK, where so many different arguments compete, seems to favour the mega project, such as Crossrail or High Speed 2, and only after many years and countless studies. Cost Benefit ratios appeal to those who want to reduce the arguments to a single number, but are readily discarded for political considerations.

Papers at the conference showed, local rapid transit systems with high returns, such as the Leeds Supertram or the Hampshire equivalent lost out to projects in London that recorded much lower ratios, but could muster support from economists on the grounds of 'agglomeration' effects. The impacts in terms of the five E's of equity, efficiency, economy, environment and enhancement are easily trumped by expediency. Politicians and interest groups go for big projects on the grounds that 'everyone else has one'. Smaller projects only win through when they can be implemented incrementally, like the Docklands Light Railway in London, for example.

A better approach is to use the Business Case, instead of, or to supplement the specious reasoning of Cost Benefit Analysis, which Professor Peter Self memorably described as 'Nonsense on stilts' in condemning the way options for the Third London Airport were evaluated. For everyone knows that engineers hide costs when their fees depend on the project going ahead, and downplay risks when there is a chance of exploring unknown territory. The benefits are anyone's guess. The Business Case approach looks at possible scenarios over time, and assesses impacts individually rather than trying to reduce them to a single number or ratio. But it still looks at the project rather than the value for the city as a whole.

The French model

The best way is surely to follow the French, and look to political leaders to make the case and convince different interest groups, while adding a percent or two to the payroll of large employers through the Versement Transport? By asking what value the different options would add to the wellbeing of the city as a whole, and giving more value to those with least spending power (as consideration of social justice would suggest), along with ecological considerations, we would be able plan for posterity, and not just austerity. Our cities can then function not only as engines of economic growth and social mobility, as economists often favour, but also as sources of pleasure.

It is this kind of thinking that created the splendid Flemish merchant buildings around the Grand Place in Brussels, or the fine warehouses that overlook Nyhaven in Copenhagen, both of which have stood the test of time. It may even have built the Roman roads that still shape the centre of London. For without local connectivity, great places soon decay. Hence instead of seeing investment in transport as a means to economic growth, surely we should value it as a necessary part of the maintenance of civilised societies?

East Germany 05/14 – Civic leadership + entrepreneurial regeneration

The amazing revival of East German cities such as Leipzig and Dresden in Saxony offers important lessons for English speaking industrial cities. For they too were hit by war time bombing and have since lost their economic roles and suffered from the resulting physical dereliction and unemployment. After decades of alien rule by the Nazis and then the Soviet Union, reunification in 1990 at an over inflated exchange rate led to the collapse of almost all of the industrial base; 90% of Leipzig's manufacturing jobs went in a couple of years leaving a landscaped scarred with empty mills and railway yards. Unemployment soared and many of those who could left for the West. This caused the population to tumble to less than 500,000 in a city that had 700,000 residents in 1939, with a massive infrastructure of utilities and schools to maintain.

Funding regeneration

Only 25 years after the Berlin Wall came down, as part of a week-long study tour with the Urban Design Group we experienced vibrant and colourful centres full of people shopping in stylish shops, sitting out eating and drinking, travelling around on modern trams, and no longer feeling second-class citizens. We stayed in one hotel in Bautzen, a town of under 30,000 residents, on a modern industrial estate let to high-tech businesses that had formerly been a plant for making lorries. Part of the explanation lies in the flow of public funds from the West to the East, where a quarter of Germany's population of 80 million live. Funds have gone into new infrastructure like Leipzig's massive trade fair complex connected by a new metro that tunnels under the city centre and high quality townscapes. BMW's new plant required building another ring road. Financial aid will come to an end in 2020 but the tide has been turned.

Renewing former industrial areas

Funds have also been invested by the state investment bank KfW primarily to help small businesses reach wider markets, and they must take some credit for the profusion of wind and solar farms around the cities, as renewable energy is one of their priorities. A former coal mine outside Goerlitz is now a landscaped country park with a vast lake and the old coal cutting machine remains as a vast sculpture. A lot of money has also been invested in rebuilding historic buildings, such as the centre of the Old Town in Dresden, bombed to smithereens in 1945 in the last weeks of the war, and made memorable by Kurt Vonnegut's account Fahrenheit 451. Now restored as a major visitor attraction, modern hotels have been developed behind recreated facades, with parking underground. Germany's first garden city in the suburbs is a short tram ride from the centre, and is being extended with energy conscious self-built homes. Indeed while we were there three quarters of Germany's energy apparently was generated from renewables.

Less obvious but just as important for urban renaissance has been the huge upsurge in creativity and civic pride exemplified by the reuse of old industrial buildings in part of Leipzig known as Plagwitz that was formerly regarded as a 'no-go' area. Laid out with railways and canals in the late 19th century by a developer called Heine, after reunification it became totally dead. The City Council, with very limited funds, focussed on drawing up the planning framework that determines what uses should go where. It revivef a smelly canal, and has introduced a series of green fingers along the old industrial railway lines and restored canals. The natural landscape has transformed the look and appeal of a previously abandoned area, and made it an attractive place for 'yuppies' and creative people to live..

Promoting regeneration

Initially Leipzig suffered from new housing investment in surrounding small towns. By designating almost every building as 'historic' – and Leipzig fortunately escaped extensive bombing- generous tax reliefs drew in money from the West. Regeneration started with the renovation of the fine 19th century middle class housing in the inner city. Investors could claim depreciation of 10% a year against their income tax. Rents tumbled as supply expanded, but the beneficiaries have been people living in the heart of the city, which is now seen as very affordable. There has been no need for social housing, with a surplus of post war flats on the edge, some of which have been demolished, while others have had their facades improved.

The process of regeneration has attracted the interest of entrepreneurial developers like Bertram Schultze, whose conversion of the Spinnerei, formerly the largest cotton spinning mill in Continental Europe, into a kind of 'arts factory' has won world wide acclaim. Trained as an architect and economist, he could see that the prospects for development in the former Eastern bloc by proceeding incrementally converting buildings that were well-built originally. He succeeded in persuading some friends to invest with him in buying the vast property for a 'knock-down' price of 4.3 million euros from the agency that had taken over the businesses that were formerly state owned. The mill contained some 60,000 sq metres of floor area, and a similar amount of open space.

By that time Western Banks had decided against investing any more funds in the East, so he had to look to local resources. Fortunately in 2003 the Leipzig Sparkasse, or savings bank, decided it would be good to fund the conversion of part of the space into a large gallery for local artists. By attracting some big names at first, others followed, and today there are 120 different studios and galleries, of which 100 are resident. Rents are kept as low as possible, with commercial uses such as call centre paying much more than artists who take over bare space.

Schultze had started by developing another much smaller building that was contaminated with zinc, but which now contains housing above offices and a restaurant overlooking the canal. This enabled him to build up the assets that made the Spinnerei project possible, where over 20 million euros has been invested over nearly two decades. Commitments to take space on short term leases are used to fund the renovation, investing typically five times the expected annual rent. He was able to tap some public funds through packages that enabled the City of Leipzig to draw down public funds from the region and the European Union. He told us he was embarking on an even bigger project in Nuremburg to convert a former factory into a centre for organisations involved in renewable energy. Interestingly, though German banks were writing off Leipzig at that time because of their experience, investors in other countries had seen what has been achieved and were much keener to be involved. But the real secret has been tapping the energy and resources of the younger people who have trained in the city, and love what it offers them.

The Leipzig model

In short a flexible planning framework driven by opportunistic City Councils, has madethe most of existing assets like universities or historic buildings. This has enabled some cities in East Germany to overcome their disadvantages and attract entrepreneurially minded individuals. Affordable housing and a lively cultural scene helps encourages them to stay. A financing system that backs SMEs has helped replace lost jobs and rebuild the 'common wealth'.

Paros and Athens 01/15 – Restoring a half time economy

Returning from helping friends pick their olives on a beautiful Greek island, I have been thinking about the model presented by Greece today, and its lessons for other weaker economies. Greece hit the headlines when the government could no longer repay its debts, following a world financial crisis in 2007/8. The figures look alarming, partly because GDP has fallen by 25% and because Greece seems riven by conflict over what to do. Yet the streets of central Athens seem remarkably calm, apart from all the heavy traffic, and there are fewer empty buildings than you would see in many a British city. A fine new metro system ties the city together, while superb pedestrian walkways connect some of the main archaeological sites. So what is the problem?

A brief history

The territory of modern Greece hugely expanded as a result of the 2012/13 Balkan wars but at the end of the Greco-Turkish 1922 war, Greece with its thousands of islands was separated from the eastern mainland, which remained in Turkish hands, and a huge population movement took place. After World War II the country also became cut off from its northern communist mainland (Albania, Yugoslavia and Bulgaria). Athens grew in importance and today is a city of 4 million out of a country of 11 million, and still growing. When I first saw Athens almost four decades ago, it seemed as if everyone had left their farms to work in building the new multi-storey apartments that replaced the old two-storey terraces. Joining the Common Market and the Eurozone provided the finance to develop tourism on a grand scale, as tavernas mushroomed on the islands, and modern ferries linked them together. In Athens an expanding government offered jobs with good pensions. Greece exploited its comparative advantage of a sunny climate and sheltered bays.

Staying in Paros in November, an island whose population of 17,000 expands fivefold in the short Summer season, I was struck by the changes that have taken place over the last four decades. Many of the basic jobs, such as in building or fruit picking, are now taken by mostly Albanian immigrants. Those who had abandoned unremunerative plots have now built homes on them, taking advantage of easy loans and lax planning controls. Food and energy has to be imported, along with virtually all manufactured goods, and wind turbines and solar panels are still rare. Everyone needs a car as homes creep up the hills, many of them now providing second homes for wealthier Athenians. While the capital sought to limit traffic by only allowing cars in on alternate days, moving outside the pedestrianized areas is still worse than in other comparable cities, in part due to the narrow pavements and poor crossings.

Sustainable solutions?

In many respects Greece is no different from other post-agricultural economies such as Ireland, Portugal or Spain. They have all made the most of the long period of post-war peace to upgrade their infrastructure, build new civic monuments such as stadia, galleries and museums (often designed by eminent foreign architects) and to welcome in tourists from the colder Northern European countries to sample their food and culture. But the season is short, and so for more than half the time at least all this infrastructure is under-used. Young people, often educated far beyond the levels their parents reached, have to find jobs abroad because the openings at home are so few. Unemployment levels remain at around 25% for young people. The universities are not filling the gaps (and thousands of Greek students are to be found studying in Swansea), despite historic strengths in areas such as design, engineering and IT.

Unlike countries with a stronger industrial tradition, whose businesses serve export markets, people's savings continue to be ploughed into detached houses, to be left under-utilised most of the time. Inequalities grow as successive governments find it impossible to raise enough in taxes to do more than keep a falling number of civil servants employed, and public services have to be cut back further. For example the many museums are only open part of the week. Some 1.5 million jobs were lost after the cutbacks, and these may never be replaced, given global economic trends.

Assembling land

Raising tax rates is no answer in a country that is so individualistic, and where national politics are fragmenting into the extremes of left and right. So surely the answers must lie in how land is used, so that people need to travel less and produce more of what is consumed locally, and not just knick-knacks for tourists? So, having hoped to escape thinking about garden cities, I was left wondering how the country that had invented the ideas of the metropolis and civilisation might make better use of its natural resources, and in so doing make its debts more manageable.

As so much is now dependant on private finance, surely a country like Greece needs a municipal investment corporation, as in Northern European countries, that can channel savings into the local infrastructure needed to support more productive lifestyles and minimise waste of all kinds? This might stop money flowing out of the country into purchasing apartments to rent in London, or adding to the stock of under-used holiday homes.

Toulouse 06/15 – Enabling smaller towns to thrive alongside provincial cities

With a population of almost 600,000 and 110,000 students Toulouse deserves to be much better known outside France. It is the fourth largest city with a dynamic economy, with 60,000 employed by Airbus alone (though only 200 are needed to assemble the giant planes). Grand streets and squares of tall buildings made of a pink brick make the ancient centre distinctive. Lots of greenery keep the Southern streets cool combined with a splendid series of parks with elaborate fountains.. Extensive pedestrianisation has reclaimed the city centre for its residents, and the food is justly renowned. It is therefore interesting to explore the relationship between this metropolitan city and its hinterland, as I did on an Urban Design Group study tour.

Connected cities

Toulouse makes the European Airbus and is essentially now a city of modern technology. Once the planned new TGV line is complete it will be only three hours from Paris. The airport is linked to the city by a new tram. This has just been extended out to Constellation, which serves the impressive air "museum ' with two Concordes and Airbuses to explore. The visitor is left in no doubt that the French first conquered the air, and are still far ahead. As well as the 17km tramway, which ends outside the historic centre, there are two Metro lines which use the driverless VAL system pioneered in Lille. The tram may be extended to the station, which is to be rebuilt to plans by Jean Busquet from Barcelona, one of the City's many expert advisors. France uses investment in transport and energy infrastructure to boost its leading manufacturers. The regional centres or agglomerations have been outperforming their regions, and even doing better than Paris.

Bastides for the future

To the North of Toulouse in former Gascony lie a series of some 300 'bastides' which originated as planned settlements in the 13th and 14th centuries. They were designed to tap the wealth of the surrounding area. The key element in the competition between the English King and the Counts of Toulouse was a large covered market hall. In some cases arcaded rows of terraced houses added to the draws. A few were fortified. Plots were sold on an orthogonal street layout, which has survived the centuries. So too have the fine churches, and most of the market halls, though most of the buildings have been rebuilt several times. Each town has its own administration, and promotes its attractions well. The physical environment has largely been preserved.

But the agricultural economy has shrunk, and Toulouse is too far away for easy commuting. The countryside is pleasant, but not special enough to draw many investors in second homes. So the population is generally falling; in the case of Bassan there were some 3 000 in 1840 but only 580 in 1999. With fewer residents and competing shopping centres, many of the shops are empty. With only the odd baker and restaurant or bar there is little to draw the tourist. Some have enterprising visitor centres. Auch offers a variety of links to other towns and restaurants, and is unusually on a railway line. This town has 23,000 residents (but little growth). It seems there are not enough creative people to fill all the gaps.

Lessons for smaller towns

The 300 bastides in surrounding Gascony are too far from Toulouse to function as suburbs. So what can they do to counter depopulation and shopping trends that favour larger towns? The first step has often been to celebrate their history and all the towns we visited have

Tourist Information Centres (closed between 12 and 2), with lots of interpretation, walking routes, and splendid signs announcing their attractions. But these are not enough to draw visitors when most of the small shops have closed. Second comes resurfacing and reshaping the streets. Some have got the cars out of the market square, and narrowed the streets with lines of parked cars and a forest of bollards. In the case of Auch, specialist shops are reoccupying the more atmospheric streets, while traffic in the central area has been calmed. An elegant fountain, and elaborate stone flags have created shared surfaces outside the town hall where pedestrians cross in front of traffic without fear.

But the real challenge is finding new roles or attractions.. Cultural tourism is good for hotels and restaurants but is largely seasonal. Artists could play a larger role if the historic homes were cheap enough. But second homes, though they create work for builders and gardeners, do little to keep old towns alive outside the summer months One solution is to use events to promote a new role that draws permanent residents, as Mauriac has done with its now famous jazz festival. A jazz school keeps the town alive at other times, and a five star spa hotel no doubt appealed to the likes of Nina Simone, who frequented the town.

In search for the secrets of wellbeing we could learn a lot from the small town of Agen, with its station on the railway line between Toulouse and Bordeaux. This small town is rated as the most agreeable place to live in France, perhaps because people are generally smiling and nice to each other. The main shopping street was alive on a Saturday with children playing chess. Even on a wet evening the restaurants were packed. Perhaps inexpensive and good red wine holds an answer!

Bratislava, Slovakia 05/16 – Creating great places in small countries

Returning from speaking at a property conference held by the Penta Group in Bratislava, the relatively capital of Slovakia, followed by a weekend break in the famous city of Vienna (see separate report) offered the opportunity to reflect on what makes a great city, and how to make cities affordable to all.

Big small city

With a population of only 460,000 out of a national total of 5.4 million, it is astonishing how much Bratislava offers a visitor. The city is very well connected, with its own airport with services by Ryanair, as well as with the fine new airport at Vienna midway between the two cities. Vienna is also linked by motorway and train and so is only an hour away, which should help tourism. Located on both sides of the Danube, everywhere in Bratislava seems highly walkable, and looks in good condition. Some great new developments, such as the mixed use high density Riverpark where we stayed, or the Eurovia shopping and residential complex, look out the river.

But the real surprise is the extensive Old Town, which is pedestrianised, and has an amazing variety of buildings. Up on the hill stands the Castle, rebuilt since the fire in the 1950s, with superb views out across the river to the post war system built development of Petrzalka, where some 150,000 people live, possibly the largest of its kind in Europe. The Soviet policy of building fresh settlements saved the historic centre from redevelopment and living in the inner city is said to be very popular. The system built flats have been colourfully painted and house a wide range of people, many of whom have moved in from the country, and now own their own home.

National pride since Slovakia became independent from the Czech Republic in 1993 has helped create a good range of attractions. Sensitive restoration and good interwar buildings by the Slovenian architect Josip Plecnic, plus an abundance of statues of notable people, give Bratislava a distinctive feel. Everywhere there are signs of investment (though graffiti on the walls of recently painted buildings in the inner city suggested that not everyone is happy).

A trip out to Danubia, an astounding art gallery on an island some 20 miles away, made one appreciate the cultural connections with other Slav nations, and the area's rich history as part of one Empire or another. Though relatively poor by EU standards, Slovakia has benefited from new car plants that have taken advantage of low labour costs. The capital has grown fast, and like Athens has benefitted from all the new construction, but without apparently getting into the same level of debt.

Making connections

A big issue is where to house the growing population, with first-time buyers looking to move on. Car ownership and usage has risen fast, as the city sprawls over a very large area. However, Bratislava enjoys a fine public transport system with nine tram lines, ten trolleybus routes, and buses everywhere. A new bridge will soon connect Petrzalka with the central tram system. Strong arguments were presented at the conference in favour of people living at high densities close to the centre, as American research suggests that 14% of GDP is lost due to commuting, which also leads to higher divorce rates! But the Penta Group is also developing a whole new settlement on the edge of Bratislava, where currently they own an out-of-town shopping centre.

The Penta Group is unusual in the range of functions carried out by its 200 strong property division, ranging from design and construction to management, and had a portfolio of 367 million euros of projects at the time. As well as in Bratislava it was also promoting major projects in Prague and Warsaw. The Group benefits from owning banks and health care providers, so that with over 30,000 staff in all it is able to weather the ups and downs of the property market.

Penta's annual conference is an opportunity for bringing staff from different countries together and sharing research and ideas. There were superb presentations on the benefits of living at high densities as well as the need to enable neighbourhoods to evolve, like life itself. We also heard from Michel Mossessian, a French/American architect based on London, on experience in Dohar, and about a new town on the sites of the old Vienna airport from the Chief Executive of the development company. My own presentation on new garden cities brought home how important it is to learn not just from the mistakes of the USA but also from good practice throughout the rest of Europe.

Quality of life

What is striking about both Bratislava and Vienna is the quality of life that capital cities in small countries can offer. By providing a combination of high connectivity and affordable housing, helped by strong municipal leadership, they have avoided the extreme inequalities that plague mega cities like London, New York or Delhi. At the same time through joint ventures with private companies they are building both better and faster than we are. Furthermore, perhaps the close connections, as with Malmo and Copenhagen, are working to stimulate ever higher standards?

San Sebastian and the Basque Country, Spain 06/16 – Regenerating an industrial country

San Sebastian won the Academy of Urbanism's Award for Great European City, and is also currently European City of Culture. A follow-up study tour backed up with fact filled presentations provided a unique chance of learning how the Basque Country, with just two million inhabitants and an economy based on manufacturing, has reinvented itself. Later travelling from San Sebastian to Bilbao, taking the metre gauge line that winds its way along the coast and through the mountains, we passed through one industrial town after another, all with active factories. The modern electric train stopped every mile or so, to pick up or drop off passengers. With strong similarities to South Wales, Northern Ireland, or even the Tyne Valley, there are some important lessons for smaller post-industrial cities.

Social ambitions

As Republicans during the terrible Spanish Civil War (Guernica incidentally is the Basque town that first experienced what bombing can do), and with its own language and culture, the people of this mountainous region have had to struggle to survive. Rich mines were tapped for heavy industry, and produced a strong working-class movement. The Spanish Queen's discovery of sea bathing in 1842 made San Sebastian popular with the rich. Its border location gave it the trappings of a French city. But the movement for Basque separatism ETA, which led to some 700 deaths, as well as the industrial decline of the 1980s – which caused Bilbao's shipyards to go bankrupt – required a new image or identity if tourism and employment were to flourish.

So San Sebastian has become a creative dynamo. Housing densities are high because building land is scarce. This supports lively bars and shopping areas, and social cohesion, as well as some of the world's best restaurants. While some have emigrated to find work, the mass of people have long links with the area and their neighbours. Only 7% are immigrants. The cultural programme is built on community engagement, and big projects, such as the conversion of an old tobacco factory into an arts centre, provide spaces for a great diversity of cultural interests.

San Sebastian's many neighbourhoods are surprisingly equal in terms of income and deprivation levels, as well as life expectancy. Unemployment at 10.6% at the time is less than half what it was in the rest of Spain (26.1%) Though the population is getting older, a programme for Active Ageing under the theme +55, seeks to engage everyone. Cultural Houses, such as libraries, and innovations such as 'human libraries' help young people discover what old people know.

Industrious valleys

Unlike in the UK or USA, manufacturing still predominates in the Basque country. The Cooperative group of Mondragon plays a key role, with some 75,000 employees, and includes major industries like CAF, which is a leading producer of light and heavy rail equipment. High levels of investment in R&D (2.7% of GNP) keep firms competitive, and yield some of the highest productivity levels in Europe. Since 2005 the strategy has been to promote science and innovation. The key is 'smart specialisation', within a series of 'clusters'. Instead of selling companies to foreign investors, and using the sites for warehousing or retail, local economic development has been fostered.

A City wide development agency (Foment), founded in 1902, has a regular income from owning the principal hotel in San Sebastian. It has a 7.8 million Euro budget, and supports

2,600 SMEs as well as working in partnership with some 70 other bodies. The main Technology Park, which is part of the World Alliance for Innovation, is part of a group of three which employ some 16,000 in 429 companies. Significantly it owns a third of the buildings. It has been developed on land owned by one of the regional Savings Banks which was previously only used as a country park.

Stylish San Sebastian

While San Sebastian has a population of 185,000, there are 435,000 living in the Metropolitan area, so good communications are vital. Half the residents live in hilly areas, and a first-class public transport system is therefore essential to avoid congestion and pollution. Cars have been excluded progressively to create a 'sustainable, safe, healthy and friendly transport system'. There is a 100% Electric Bike sharing service, and the main technical university is trialling driverless electric buses as part of a European consortium.

Traffic has been taken out of the main streets, and parking has been put underground. As a result the city centre is compact and highly walkable. The extensive 'Old city', which due to fires and wars largely dates from the 19th century, is packed at night with people strolling from bar to bar. The bars compete in the quality of the 'pinchos' (or tapas) they offer as snacks, and which form an excellent meal.

Streets are used flexibly, for example by allowing parking on them at night. The two sides of the City are connected by a new underground Metro line, and the current 2 kilometres is being extended to 30km. Old tunnels through the hill that divides the two parts have been turned into a cycle route. A new bus station has been built next to one of the railway stations.

Municipal leadership

Though the three main cities compete for investment, there is also close collaboration, supported by the Basque Parliament, and regional financial institutions such as the Savings Banks. The successful transformation of San Sebastian (and other Basque) cities is the product of progressive local authorities, backed by a regional government with substantial financial autonomy. The City had the same Mayor for twenty years, and it was he who applied for selection as European Capital of Culture (only to lose out to the opposing party in a subsequent election!).

A good example of the City's role is the development of the main Technical University, which has some 16,000 students. The City developed its own MasterPlan, based on a series of large blocks around courtyards. It acquired the land with a long-term loan from a financial institution. Sites were sold off within briefs on 70 year leases, which specified, for example, a mix of private and social housing.

A better known example of a proactive approach is provided by Bilbao, which lost its main industries in the 1980s. With advice from British consultants, the City took over the land, using non-payment of municipal taxes as the excuse. Sites were then developed within briefs, the most notable being the iconic Guggenheim Gallery. Though it is frequently said that Frank Gehry's building put the City on the world tourist map, in fact it only came about though municipal enterprise. It was the City who funded the £100 million building, and had already started the transformation of the banks of the River Nevion, including an underground Metro system designed by Norman Foster's firm.

Social cohesion

The Academy of Urbanism's study tour not only reinforced San Sebastian's credentials as a great city, with a great team of municipal officers, but also highlighted the economic potential of medium sized cities (150-250,000). The secrets appear to lie in combining investment in local infrastructure with imaginative and well-designed development. But it is the underlying drive for social cohesion that underpins their economic success, not a reliance on either private markets or monuments to public aggrandisement. There are many cities in the UK in a similar position who could well benefit from adopting similar practices.

Athens and Byzantine towns, Greece 06/16 – Addressing economic decline

Travelling with the Urban Design Group to explore the legacy of Byzantine towns in the Peloponnese at a time when Britain seems intent on leaving Europe made me reflect on our 'common wealth of cities'. So what causes countries like Greece to fail, while others like Germany are resurgent? The answers lie not just in a scattered geography and troubled history, but also, perhaps, in the way investment decisions are made.

Exploding cities

Starting in Athens, the iconic birth place of democracy brought out the challenges of governing a country where 4 million people, a third of the nation, now live in the capital city. For decades the local economy was fuelled by people arriving from the poor islands and small towns that characterised most of Greece. Dense apartment blocks stretch for miles. Naturally the young are attracted by educational opportunities and the bright life. But they are the first to suffer from recessions, as job opportunities close.

Graffiti everywhere are obvious signs of malaise, yet even in the anarchic areas around the main university, the streets seem safe enough, and beggars no more frequent than in The Strand. Tourists flock around the Acropolis, but in early June were not obvious outside the historic centre and main squares. In the small Byzantine towns, tourists were few, and the ruins are relatively recent.

One casualty of the move to modern housing has been the abandonment of fine 19th century houses in larger towns like Sparta (which is built on a 19th century grid) or Kalamata, a bustling port city. One young man serving in a bar in the Historic Centre was off to study digital marketing in Salford because he said there were no longer good jobs, and the professional classes have left the country.

Extensive infrastructure

The high-quality Metro and tram system in Athens, along with motorways between the cities, help to explain why the country has got into so much debt. Much was linked to the Olympic Games which were not the money spinner that had been expected. However you can now reach the coast from the centre of Athens on over-crowded and not very frequent trams, which make living on the sea much more attractive. So the cities seem to be polarising.

Once the money ran out, and the country could not pay its debts, many schemes have been truncated. This has left an unbalanced situation outside Athens, where the railway system, which was being electrified and converted to standard gauge everywhere, has been left to rust. Coaches will no doubt take over on the empty new motorway but add to congestion and pollution in the towns.

Financial holes

As the growing middle class imported cars from Germany or France, and enlarged or built second homes, Greece, like Britain, took on an ever larger deficit. Unlike Britain however, much has been invested in new housing and infrastructure that will last for years. The European Union provided incentives for investment in prestige projects beyond what was actually needed, and there is little prospect of the loans being repaid.

Sadly, one of the casualties of austerity has been small businesses and manufacturers, who can take very little money from their bank accounts, while being asked for higher taxes. Empty cafes suggested that cutbacks were being made in entertainment, and it is said that many are now going hungry, such as the old living on fixed incomes and reduced pensions.

Historic legacy

European countries not only have a large historic legacy to look after, but also have had to deal with the ravages of wars. The Peloponnese wars between Sparta and Athens are famous, but even more serious were the endless conflicts in the Mani Peninsular, made famous by Patrick Leigh-Fermour, who eventually retired there to write. So frequent were the conflicts that people built towers for safety. After the Roman Empire was split the area was fought over by the Byzantines, the Franks and the Saracens, before being incorporated in the Ottoman Empire. In the late 19th century it became an isolated backwater.

Though recently it has been rediscovered by 'cultural tourists', making a living there is very hard outside a short season, and much has to be imported. So the visitor is left wondering whether better value could have been achieved by focussing resources on a few larger cities and those that can be reached by water, rather than trying to improve disadvantaged rural areas.

Recovering from austerity

Greece seems to have built the housing and infrastructure the UK badly needs. But its economy is over-dependant on services such as tourism, where it is competing with an ever more connected planet. Its image has suffered a blow from the financial crisis, and domestic tensions must be high. But surely investment in the 'common wealth' of streets and heritage is something that benefits the wider world, and should not be subject to the same cuts as private wealth?

In my previous postcard from Greece back in January 2015 I suggested that new financial mechanisms are needed to channel savings where they yield higher returns for society as a whole. Unless solutions are found, the misery produced by austerity will scare away the very tourists on which countries like Greece and the UK have come to rely on.

Montpellier, France 09/16 – Transforming a historic French university city

Revisiting Montpellier in South East France after almost 20 years offered a unique chance to assess progress in the fastest growing city in France – which has gone from 28th to 8th in size in just a few decades. I met up with the people running the City in the company of members of the Academy of Urbanism, who were assessing it for the Great European City award. The two day visit provided exceptional insights into what makes a great city, as well as how to make the most of any assets. Montpellier as well as any European city shows what good urbanism can achieve.

Of course Montpellier starts with some advantages over cities in Northern Europe. It is in the sunny South of France and now less than three hours from Paris by TGV, but with strong competition from larger cities such as Nice. It had one of the oldest universities in Europe, with some 70,000 students out of a population of around 270,000. These helped attract some of the most advanced firms in France, and become a magnet for young people, thanks to municipal leadership and financial ingenuity.

A grand spatial plan

The City was little known outside France before a law professor named George Freche took over as Mayor, a position he went on to hold for almost 40 years (1977-2010). A start had been made under President De Gaulle, who provided some funds to house former colonists from North Africa, and to promote tourism in the curiously shaped La Motte. But it was Freche who had the courage to promote cultural events in 1977, to take over military land in the historic city, and start expanding the historic centre.

He commissioned the Catalan architect Ricardo Bofill to design and then build the ambitious Antigone quarter, a pseudo classical response to the 70s Polygone shopping centre. This provided 4,400 new homes on 45 hectares, 25% of which were public housing, and was a 'laboratory' for new ideas. Technoclusters from 1985 made the most of 'grey matter' or brain power, with five clusters each with their own conference centre and governance.

Freche had a simple but grand spatial vision of reconnecting the city with the Mediterranean on which its early fortunes as a trading town had been based. The cohesive spatial plan , which is referred to by the acronym SCOT, is unusual in defining the areas not to be developed. The land where Porte Marianne is built, which covers some 400 hectares, had been mosquito invested swamps, and so the first step was to make space for the River Lez, which forms the spine of the new city. A development framework divided the land into four quarters, each planned by a different architect, and marketed for a mix of uses and tenures to create more balanced communities than are usually found. At least a third was kept as open space, with a high level of biodiversity. There is an Eco Quartier with 2,000 new homes and 5,000 residents as well as new offices and a seven hectare park which provides a buffer zone with the water.

Funds were mobilised to build the longest tram line in France, and now the most successful. This has been followed by three other lines, with line 3 running out almost to the sea. Though congestion around the old town can be high, the trams enabled traffic to be removed from the centre in 1986, as trams and pedestrians can happily coexist. The tram also helps to orientate the visitor, and the line just completed circles the town on the line of the old walls. The City has also pursued sustainability by investing in a large Combined Heat and Power complex which provides heat to all the new buildings, using biomass. The Town Hall by Jean Nouvel was opened in 2011, and is also designed to minimise energy consumption.

The city suffers from high unemployment among young people, which has doubled since I was last there. Some 30% of the population is Muslim. The city feels welcoming, and there was none of the graffiti which had struck me twenty years ago. In truth, historic and university cities inevitably tend to attract more people than can find jobs. The challenge is how to grow them in ways that minimise sprawl and social exclusion. The achievement in mixing social with private housing, and some 40% of housing in Antigone is social, must have helped Montpellier avoid the riots that have beset other French cities.

City development company

Montpellier has built on a huge scale, over 2,500 new homes a year, and at one time over half the population was involved in construction. The key has been assembling the land and ploughing most of the uplift in land values back into infrastructure. Development was promoted by a private company called SERM owned largely by the municipality. The Caisse des Depots, the state investment bank, took a 15% share, and as they scrutinise investments carefully, this helped in attracting finance from commercial banks. Private developers we met were quite happy with the role played by the municipality, as risks had been reduced, and funds were raised at lower cost than they would have had to pay.

SERM employs a staff of some 120, of whom a fifth work for the energy subsidiary. Their work is focussed around a series of ZACs (Zones d' Amenagement Concerte) where extra powers are available to acquire land if required. The City has been assembling land for 30 years, which puts it in a powerful position as far as securing quality is concerned. Serviced sites are now much smaller than they used to be. As an example part of the area around the recently refurbished railway station has been the subject of competitions for a 0.4 ha site. Architects and planners in the municipality had drawn up the brief, in terms of uses and massing, and then architects were invited to come up with schemes, for which they were reimbursed. The land is then sold to a developer at a prearranged price, and the winning architect(s) have to be taken on. Work started in 2008 and the first building was completed in 2016. The scheme looks extremely attractive, and has benefitted from the procurement process.

Housing choice is assured by requiring a mix in every scheme, with around a third market sale, a third are affordable and sold at a discount with requirements for repayment when resold, and a third are social and rented by the City or one of the housing associations (HLM) active in the city. The high rate of building and variety of new homes has taken some of the pressure off housing in the historic centre. Generous welfare policies help reduce the problem of homelessness to manageable proportions. Though there is little activity by self-builders or cooperatives, it is much easier to obtain a plot than in the UK, and the new developments include detached housing as well as blocks of apartments.

The City has been very successful in attracting new businesses to set up in various incubators, some making use of old buildings. Montpellier is said to have the world's best incubator. 40,000 new jobs were created in the decade after 1995. It has been a leader in the development of Technopoles or science parks connected with research and innovation in the universities, and over 14 business parks were set up early on. In addition, as the population has grown, it has generated demand for services of every kind, and the city of Montpellier provides over 70% of the jobs in the Metropole. As French local authorities can raise much more of their budget from the local population growth is self-reinforcing.

Integrated local transport

One of the main achievements has been the network of stylish trams, which promote the image of a progressive city. Funded through a combination of national, regional and local

sources, a great incentive has been the Versement Transport, a charge on the payroll of firms employing more than 10 people. Though fares are low, about a euro a trip, the farebox almost covers the running cost, and the first line, which is 10km long, is the most successful in France. 75% of its 350 million euro cost was raised by the District. As the head of the Tram system explained at a conference held by the EU research project Sintrophet, running trams economises on labour as one driver can handle some 300 passengers at peak times. The city's research shows that even in the out-of-town shopping centre of Odysseum, some 40% of purchases were made by people arriving by tram, and the out of town hypermarkets had 15% of customers on public transport. Today new developments have to be located on the tram system, and the adage is 'No trams no business'. The Municipality is now doing away with roundabouts to help pedestrians cross the street.

Though the cost of installing trams can seem high, half the cost goes in redesigning and rebuilding the roads. Cars were taken out of the centre, and some 14,000 car parking spaces are provided in a series of underground car parks. Recent research has shown that car usage has been cut to 40% of trips, and residents in the centre no longer need cars. The next stages will be to provide High Performance Buses to serve the more peripheral employment areas. A new station on the TGV network is being built on the edge of the city, and work is now starting to replan the wasteful car-based commercial developments on the outskirts of the city.

Effective governance

The fragmented nature of French local government, with some 33,000 communes, makes strong local leadership essential. This has only been possible since President Mitterand devolved power from Paris to the regional cities, and unleashed the growth of provincial France in the 1980s. The City of Montpellier, with its population of 270,000 since 2014 forms part of a Metropole or agglomeration of around 430,000 and there is a population of over a million in the wider region formerly known as Languedoc, of which 43% are under 30. Development is secured through the city owned development agency SERM, who is usually chosen to lead developments in each of the ZACs.

The Mayor of the City is also President of the Metropole, which brings in 31 different municipalities. George Freche and his supporting team were famous as enjoying being a 'big fish in a small pond'. The current Mayor, Philippe Saurel, had been his deputy. Saurel stood with his 'list' of associates as an independent, on the 'ticket' Montpellier est vous. This enables him to appeal to people from all sides. Interestingly he is a dental surgeon by profession, and is promoting his own unique brand of city leadership under the theme of Repairing the Republic.

Saurel is organising a network of Mayors in other Mediterranean cities, such as Palermo, with the ultimate aim of creating a new 'parliament' of Mayors or Parliamente de Territoire, with some 55 conurbations. The city already employs over 4,000, and will be merging with the Metropole to employ some 6,000 staff. This gives it a huge influence, and the continuity is noticeable, which must help in delivering the ambitious aims that have been set for the City.

Eindhoven NL 11/16 – From forbidden city to creative dynamo

In the early 1990s Eindhoven, an industrial city in the South Eastern part of the Netherlands, was hit by two crises. Philips, the electrical giant around which the City had grown, decided to close down manufacturing in the City and buy from the East. Shortly after DAF, the major Dutch motor company went bankrupt.. 30, 000 people lost their jobs, a third of the total, buildings emptied in the heart of the city, and the city had to reinvent itself. Yet today, the area accounts for a third of the country's exports, and is recognised internationally as one of the world's most innovative cities. The Rough Guide in 2003 said 'ultimately more visitors come her for business, not pleasure and it shows', yet it has become a major leisure and shopping destination, especially for young people.

Visiting the city as part of a team from the Academy of Urbanism there to assess it for the Great European City award, and meeting key actors in an exciting three days, set me thinking again about how cities can change direction, and what it takes to do that. Indeed the Mayor spoke about the city's DNA, and a process of organic co-creation that is replacing the old 'top down mechanical model' which created the ugly downtown areas of the 1960s. So transformation has to be more than physical.

'Creative destruction' and the Triple Helix

The crises of the 1990s led to three people coming together: a former Mayor, the leader of the main industrial companies, and the head of the university, one of three Technical Universities in the Netherlands. These three formed what became known as the Triple Helix., and encouraged all 21 municipalities in South East Brabant to contribute to a regional Stimulation Fund. This was then doubled by the European Union. Importantly projects were often led by the business community. One result was the idea of Brainport Eindhoven, to compete with the much large cities of Rotterdam and Amsterdam.

The closure of Philips released thousands of skilled engineers and researchers, who wanted to stay in Eindhoven. They provided the raw material for a whole new set of industries, such as AMSL, who make the machines that slice up the wafers used in silicon chips – and who are now as large as Philips. So Schumpeter's theory of 'creative destruction' as the key to successful capitalism seems to have worked!

Co-creation and innovation

The current Mayor, Rob Van Gizel, came from a national political career to lead the city in 2008. His book The City that Creates the Future stresses the importance of experimentation and collaboration, a process which grew naturally out of being a poor agricultural area where cooperation was essential for survival. The most inspiring place we visited was Strijp S, just one of the huge old Philips factories that has been turned into a creative hub. A roof garden on top, over loft apartments, with shops and business units on the ground floor, the development has been led by TRUDO, a local housing association www.klokgebouw.nl , which has developed some 5,000 units there.. Significantly this forms on of a hundred centres for the Design Week that draws over 200,000 people into the centre of Eindhoven.

It is the proximity of other creative people, some 2,500 designers for example, that enables the inter-trading that enables new businesses to take off so readily, and to survive the birth pains. A beer with friends at the end of the day before cycling safely home provides a quality of life that never be replicated on the Internet. So too does the easy availability of a wide

choice of housing, with some 20,000 now living in the centre, ten time the number of a few decades ago.

Housing associations have taken up opportunities that conventional developers would ignore, and are involved in providing discounted housing for sale –smart housing – as well as renting to a much wider range of people than in the UK. Because housing is affordable, young people stay and go on to bring up families in the city. This is because of much better access to both land and finance, and while Eindhoven promotes itself as the Garden City because it has so much green space, it is in the form of green fingers, not a green belt. Eindhoven is in the forefront of innovations to make healthier living easier, and, for example, is using lighting to change the atmosphere of areas where conflicts might take place, such as bars.

The Eindhoven Connection

In a beautiful book of photographic essays, Thom Aussems, the Chief Executive of the TURBO, the housing association that has transformed part of Stripj S, explains the importance of face to face contact and cross-pollination in innovation. Housing associations account for about half the new homes built in the Netherlands, and TURBO has gone further in providing workspace and shop units, as well as organising festivals. Being a medium sized city has its advantages as 'Nature is just a short bike ride away.'

In a project to regenerate a run-down housing estate, students were offered flats at a discount of a hundred euros a month in return for spending 10 hours a week helping children with their homework. There are now 50-60 voluntary activities, and the local school was the best in the South East of the country. Thom contrasts the situation in Eindhoven with Manchester, which he loves, but where the wage levels are among the highest in the UK but residents' incomes among the lowest. He sees the challenge as creating balanced communities, and taking over old buildings has provided the means.

A Europe of collaborating cities

Significantly the Mayor's book carries a foreward by Benjamin Barber, American author of If Mayor Ruled the World: Dysfunctional nations, Rising Cities. In response to dissatisfaction with the European Union, and the Grand Challenges such as energy, poverty and ageing, in his book Rob van Gijsel asks 'why not use all that power to combat European disintegration? Why don't we create a framework which enables urban areas in Europe to interconnect, interactively and intensively, in schemes and substantive alliances which focus on tomorrow's challenges?'

Significantly Einhoven is already partnering with Manchester and Stavanger on a project to improve mobility and sustainability at neighbourhood level. For example 3D models are being used to see how changing their homes could affect comfort, energy consumption and costs. Eindhoven is already a great example of a 'Well-connected city', with an airport only 20 minutes by bus from the railway station thanks to segregated bus lanes, while frequent and cheap trains connect it with other cities, such as nearby Den Bosch. The connections are multiplying.

Having spent the weekend visiting the pretty old towns of Maastricht and Den Bosch, I was struck by how a city on the move can excited the passions of those who work for and with it, even when resources are tight, and the attractions are less obvious. Eindhoven prides itself on 'doing things' when people in The Hague or Amsterdam are only talking. Perhaps this spirit can be exported to more of Britain's ex-industrial cities as they are forced to start thinking for themselves?

Vienna, Austria 05/17 – Creating a model for smarter urbanisation

Vienna has undergone a transformation since the bleak days of The Third Man, and now regularly tops the polls as one of the world's best cities. Mercers, for example, have rated it number one from 2011-17. Yet the Lonely Planet Guide as recently as 2007 was complaining of the excessive amounts of beggars and dog poo! The City benefits from the long socialist tradition of 'Red Vienna' which has left a legacy of publicly owned housing, transport and green spaces, and iconic buildings such as Karl Marx Hof. The Vienna Woods and other mountains form an effective 'green belt' round much of the city, and any land that is taken for building has to be replaced elsewhere. Some 45-50% of the metropolitan area is green out of a total area of 415 sq km.

The heart of the city is made up of high density blocks of flats along streets, which support a high quality public transport system. Indeed according to The State of European Cities 2016, Vienna has the highest use of public transport of any European city (followed by Zurich). Vienna also stands out for reducing car use, from 40% of trips in 1993 to 27% in 2012, whereas London went 46% to 38% over a similar period, as did Paris. So it is perhaps not surprising that Vienna is in the top ten of European capitals in terms of life satisfaction, and also performs well on other measures such as GDP per capita.

With a population of 1.8 million, some 25% of the Austrian total, Vienna functions not just as a capital city, but as part of a wider network of industrious and green cities from which others can learn. In a visit with the Urban Design Group, we found out how the City is developing plans for STEP 2025 through three themes: 'building the future; reaching beyond its borders; and networking the city.' What stands out to the British visitor is not only the City's success in taming the car through a superb integrated transport system, but also keeping such an attractive city affordable through their approach to building homes for rent, including several stylish new quarters. Indeed the city seems remarkably homogenous.

Connected cities

Vienna was once the capital of an empire with 50 million inhabitants, and is exceptionally well-connected with the rest of Central Europe. Capitals such as Prague and Budapest are only an hour or so away, and Bratislava is only 60km away and attracting a lot of less-skilled manufacturing work. Austria has much in common with neighbouring Switzerland, and the mountainous valleys encouraged early industrialisation and railway building. Frequent trains operated by Austrian Railways and its partners such as Hungarian Railways link the main cities of Graz, Linz, Salzburg and Innsbruck. The train trips reinforced a strong image of Austria as part of a dynamic European Union with a thriving economy. Every small town shows off its modern factories on the outskirts, often with their own sidings, and so the lines are used to capacity.

In addition to large long-distance trains going through to Zurich, Prague or Hamburg for example, there are also plenty of modern local trains connecting up suburban stations. With low fares and frequent services, the railways play a large part in improving urban quality, and making it attractive to live in towns. There are 225km of tram and 79km of underground lines, and the travel pass also applies to the train lines and buses, with no barriers and few ticket inspections.

3 million live in the greater metropolitan area of Vienna and the current modal split is 39% public transport, 28% walking, 6% cycling and only 27% motorised. The 'urban mobility concept' is that 80% of trip will be eco-friendly by 2025, and only 20% by car. The greatest achievement has been the pedestrianisation of some 430 metres of the main shopping area,

Mariahilfer Strasse, while a further 1200 metres is an 'encounter zone' in which pedestrians take precedence. The whole area within District 1, which has a diameter of about a mile, is largely traffic free. This contrast vividly with places such as Oxford Street which is dominated by buses crawling along, or Trafalgar Square. Like Freiburg, Vienna promotes itself as a 'city of short distances'. Pedestrians cross at the lights because you do not have to wait long, and the streets seem very orderly.

The main stations have been rebuilt several times, and act not just as transport hubs but also as commercial centres. The buildings themselves are simple and functional, not architectural icons, so that the investment has gone into rail services. Thus Vienna's Hautbahnhof has been turned into a through station, and the railway yards around it have been redeveloped at high densities for a mix of uses. It is very easy to connect between one mode and another, with trams and buses sharing the same platforms in smaller cities such as Innsbruch, whereas in Vienna the trams go underground. Excellent information systems and generous concourses make interchange easy. By building down and developing the underground space for shopping, including vast supermarkets, the stations serve many purposes and facilitate movement between both sides of the tracks.

Affordable housing for all

Most people live in apartments, and Vienna stands out as a city that has largely avoided house price inflation. Housing costs are relatively low (around 25% of incomes?) thanks to 80% of homes being rented, of which 60% are owned by the City, whose aim is to keep housing costs down. The municipality owns 220,000 flats, and there are 330,000 social housing units in total. 60% of the housing stock was built before the First World War, and the City built 63,800 units between 1923 and 1933, some of which, like Karl Marx Hof, are internationally known. Space standards are rising, with an average of 34sq m per person now compared with 27sq m 20 years ago. Along with a rising population, the City needs to build 10,000 homes a year to keep pace.

Housing is managed by a number of different bodies such as housing associations and cooperatives, and many of the new blocks have a mix of tenures in them. There is a city owned development agency which acquires land and assigns sites to developers (the Wohnsfond Wien). The aim is to secure a balance, though the Municipality may now have high levels of debt. The key to viability is that the City caters for middle income families. Much of the new housing has been provided through redeveloping brownfield sites such as railway yards or infill buildings, but they are now starting to face the challenge of developing on privately owned land, and land value taxation is a subject of political debate.

New urban quarters

The City has taken the lead in promoting a number of high quality schemes around the stations. 100 ha is being redeveloped at the main station, where there will be 13,000 residents and 17,000 jobs. Nordbahnhof, the Northern railway station is being developed over the period 1994-2030 for 20,000 residents and a similar number of jobs around a large central park with play facilities for children. The blocks of apartments are all very different, and tend to have commercial space on the ground floor, four floors of social housing and two that are privately owned. There is already a wide range of shops and cafes, as well as a number of major employers.

The most ambitious scheme is the redevelopment of Vienna's old airport as Aspern Seestadt, or lakeside. Built around a 4.5km extension of Underground Line U2 which was opened in 2013, four years after the start of work, it comprises 240 ha. It is being developed over the period 2005-20 for 10,500 dwellings with 25,000 residents, and some 20,000 jobs. Very imaginative landscaping, as well as the water areas is turning a peripheral location into

a desirable area, which is particularly popular with young families. The idea of the lake was to avoid having to bring building materials in, and this is just one way in which Vienna is demonstrating its credentials as a 'Smart City'. All the housing so far is in the form of apartment blocks but all look very different, and relate well to the streets and adjoining green spaces. Indeed some space is given over to growing food, so that town and country are reconciled.

The model new settlement of Aspern Seesdadt

Under construction on a 240ha airfield that closed in 1950, Aspern is halfway between Vienna and Bratislava, and just off the motorway. The plan was agreed in 2007 and development started in 2013. The masterplan proposes 10,000 new homes for 20,000 people and a similar number of jobs, with currently 2,000 people working there. The heart of the development is a 4ha lakeside leisure area, which is 8-10 metres deep, and the excavated materials were reused to reduce lorry movements into the site.

The development is being undertaken by a joint venture between the government who own the site, the Vienna Business Agency and the Vienna Insurance Group, with a team of 20 people. Vienna is exceptional in holding house prices down through the City's role in providing housing, which it subsidises by 3-400 million euros a year. Vienna's population of 1.8 million is almost back to its peak of 2 million in a country of 8.5 million, and is one of the most popular destinations in the world.

A recent OECD report on Local Economic Leadership explains that 60% of households live in subsidised apartments and about 80% of newly built housing is publicly subsidised The City owns around 230,000 apartments which house nearly a quarter of the population. A Land Procurement and Urban Renewal Fund sells or rent land to some 30 housing cooperatives who oversee most of the new housing. The market power of the Fund helps keep prices reasonable, as private landlords must compete with social housing for the same tenants.

A great European city

When the walls of Vienna were pulled down in the 1860s to create the Ringstrasse, rich families vied with each other to build virtual palaces in what became the capital of the Austro-Hungarian Empire. Artists like Klimpt benefited from wealthy, and often Jewish, patrons. The city established a world-wide reputation for good living in terms of art, music and food that still stands. The city has also managed to adapt to change without losing its special qualities, and is designated a UNESCO World Heritage Site. Its extensive tram system undoubtedly helps, and there are underground lines as well as a fine new central station and airport terminal

Buoyed up by its top scores for quality of life in international surveys such as Mercers and the Economist Intelligence Unit, the city has attracted international offices, including many UN organisations, making it very cosmopolitan. The city was classified as the most prosperous city in the world by UN Habitat and also is one of the top cities for innovation. Like Bratislava, the centre is very walkable. But instead of new shopping malls, the large main streets have been pedestrianised, creating an experience unmatched by any other city I have visited. Many of the huge palaces are now museums and galleries. A Museum Quarter has been taken over by architects, along with the new Leopold Gallery that houses a private collection of Shiele's work.

The City is now building Underground Line 5 to open up more of the North Western part of the city to development. Transport investment is jointly funded by the City, the Province, and

the national government. With a growing student population (200,000 currently) and some immigration (21% of the population were born abroad, and the City Deputy Mayor for Planning is herself Greek), Vienna may be facing major challenges in future in keeping housing affordable. There could be resistance to expansion from the strong Right Wing parties in the surrounding countryside, which suggests there may be similarities with the situation in London.

Enterprise and innovation

Vienna has a thriving economy, and 103,000 still work in the 'production and distribution of material goods'. There seem to be no empty shops, (which applies to all the cities we visited). The spaces that would have been vacated when the main shopping area was upgraded have found new uses as 'Concept Shops' run by very creative entrepreneurs. A useful leaflet helps to promote knowledge of their existence, as does the relatively low costs of some E12,000 a year that includes heating and property taxes.

Vienna now has an attractive 'alternative' area near the main market called Freihaus Viertel, which has only taken off in the last four or five years. With low housing costs, residents have more to spend on furnishings or clothes, which in turn must create opportunities for the many small businesses that make up the local economy. Vienna is also promoting the 'green economy', and for example there is a technology centre located at Aspern Seesdadt called Aspern IQ as well as Vienna's largest social service employer.

But Vienna is also a major financial and trading centre, helped in part by its excellent universities, and notably its economists. The Vienna University of Economics and Business has some remarkable buildings, several by British architects. As with other capital cities there are several hundred thousand students, and efforts are being made to encourage spinoffs that will help retain the 'brain power' the city attracts.

Living heritage

The countryside is never far away, and some 12 different types of green space are designated in the City's plans, including 'lively streets and pedestrian areas.' Vienna boasts 100 museums, and has an extraordinarily rich heritage of grand buildings in the central area. As well as the many imperial buildings, rich Viennese businessmen built palaces for their families along the Ringstrasse, which replaced the old City walls between 1860 and 1890. Designated by UNESCO as part of Vienna's World Heritage Site, it provides a place for locals to promenade as well as for tourists to wander or ride the tram. The buildings have all been restored, and many are now grand hotels, while others include the main Opera House, and art galleries with world famous collections.

The Prater, with its iconic Ferris Wheel, still provides popular entertainment, as does the Danube. So, not surprisingly, Vienna is one of the most popular tourist destinations. All the streets are now very clean with no graffiti or vandalism (contrasting hugely with what we say on the train ride from Basel to Strasbourg in France). This suggests an underlying sense of order or collective action within which individualism can play out, rather than a market dominated system, as in the UK.

Smart city planning

At the start of our visit we were given a presentation, with some excellent short cartoon films, on the new City plan STEP 2025, which was adopted in 2014. This sets out some basic values to provide a city wide framework, with a focus on 'crossing borders'. There are separate sections for eight thematic topics, such as Production areas, or Local and business centres, and these are grouped into three sections: building the future; reaching beyond its

borders; and networking the city. So taking the Urban Mobility Plan, which is one of the topics, this starts with the objectives of being fair, healthy, compact, eco-friendly, robust and efficient. As an example of a practical policy, in Aspern Seestadt, a Mobility Fund is supported by not building garages, which is used to pay for eco-measures, such as car sharing.

Considerable stress is placed on engaging with the various communities through 'an intensive dialogue with numerous experts.' Communications are excellent, with the use of short animated films to explain difficult concepts, and short reports in English. STEP 2025 is designed to provide a strategic framework for local plans through a polycentric city that makes the most of under-utilised land in the outer areas. 'Target areas for development' are identified where collaboration between the different sectors is key through 'implementation partnerships.' Significantly the STEP 2025 report concludes by emphasising the importance of reaching beyond the borders: 'Key elements of this task include close consultation on all issues of regional planning (e.g. co-ordinated development along public transport axes, fine-tuned active land management policies').

Conclusions

Though Vienna's position and cultural heritage are very special, all the Austrian cities we visited shared excellent integrated public transit systems and compact high density residential areas and possibly a similar set of values, with pride in their past and future. Vienna, as the capital of one of the many small European countries, clearly sees the importance of collaboration across borders, and shows how more proactive municipal leadership can work to everyone's benefit.

Ljubljana, Slovenia 09/17 – Creating common wealth from natural and social capital

How can a small country flourish in today's highly global economy? Experiencing the delights of one of Europe's smallest and newest countries, made me reflect on the nature of capitalism in the 21st century when intelligence could be driving a fourth industrial revolution. Slovenia has gone through subservience to Venice in the Middle Ages, then 50 years as part of the Austro-Hungarian Empire, before emerging as part of the state of Yugoslavia after the First World War, with its own language, and the architect Joze Plecnik who helped beautify the historic core of Ljubljana. After the Second World War, Soviet-style system-built apartments predominated, but after Yugoslavia dissolved in the early 1990s, a programme of beautification began again. Today, the centre is traffic free, clean, and has a quality that matches the very best European cities, such as Vienna and Copenhagen, with a population of only 300,000 in a country of 2 million.

The explanation for Slovenia's success cannot just be tourism, with only 42 km of coastline! True it has one of the most atmospheric of seaside towns in Piran, and a busy resort in neighbouring Portorose, but these are dwarfed by the towns along the Adriatic coast in neighbouring Croatia. It does have the enterprising port in Koper that seeks to rival Rotterdam in cargo handling, with a fine new motorway that extends through to Vienna and beyond. But though connectivity is a necessary condition for growth, you need much more to combat the brain drain that afflicts smaller countries. So could the explanation lie in how Slovenia has stimulated enterprise while avoiding some of the dangers of market capitalism, which values the individual over the collective? A city with no visible beggars or litter, and a dynamic Municipality competing for the award of the Academy of Urbanism's Great European City, seems to suggest there is another way.

Natural capital

The dominant feature of the landscape is wooded hills. Some 70% of the capital is covered by forests that help cool and clean the air in Summer, while in Winter as many as 40% ski. The water is so fresh it does not have to be treated. The Slovenian word for 'clean' is Snaga, which is the name of the municipally owned waste department. This has achieved one of the highest recycling rates in Europe thanks to investment in advanced facilities for sorting and processing that handle 110,000 tons of rubbish a year. Not surprisingly Ljubljana was voted European Green Capital in 2016.

Instead of an arid green belt, the woods come right into the town, creating fine parks with superb restaurants and picnic spots. The river has been opened up and new bridges built to make natural meeting points. The old buildings have been sensitively restored and reused, and investment in the public realm has boosted the many bars and restaurants and speciality shops and galleries that make the centre so special.

The greatest achievement has been taming the car, which means the centre is quiet and pollution free. When the Mayor Zoran Jankovic was first elected he saw the biggest problem as traffic. Since 2008 traffic has been excluded from all the main streets in the centre, creating some ten hectares of pedestrianised streets. With 26 Park and Ride sites on the edges, and a superb municipally owned transport system, behaviour has been radically changed, and the city now boasts one of the highest cycling rates. Interestingly originally only 50% wanted to exclude the cars but now 90% are looking to also keep buses out.

So though car ownership levels are relatively high, and a gigantic business and retail park has been developed out of an old area of warehouses, the centre is able to compete on the quality of the experience, and there are no empty shops.

Economic capital

Being small, makes it all the more important to tap knowledge to create good jobs that will stem migration. High density apartment blocks and good public transport makes interaction much easier. The policy has been one of social mix, but 80% of households own their own property following independence. The Urbana card is like London's Oyster Card except you can use it for much more, and the bus fares are only 1.20 euros for a 20 minute ride. As buses generally have priority, and with bus gates at the edges, car use within the centre has been kept down.

As the head of their Technology Park put it 'We are small and so we have to be innovative to survive.' With 55,000 students, the University is an important force, and English is widely spoken. However the City and the Regional Development Agency that covers the wider conurbation have gone much further. The Technology Park combines workspace for start-up with training, and the City put in land as its contribution. Accelerators then offer access to venture capital. An annual competition and road show flushes out new ideas. It is now the largest innovation centre in South Eastern Europe with some 300 companies and 1,500 employees, and one of the most successful of 400 world Science and Technology Parks, now with offices in India, China and Iran.

Ljubljana is an important service centre, and no doubt the lively evening economy provides plenty of jobs for young people in what is a relatively safe environment. But additional efforts are going into the 'creative economy', with, for example, a 'library of things'. The aim is to get visitors to stay an extra day by offering more to see and do. What is most impressive is the business-like way planning is done, with a focus on projects and their completion, rather than policies. Their slogan is:

'Vision without action is merely a dream; action without vision just passes the time; vision with action can change the world'.

Much of the credit is given by everyone to the Mayor. Formerly the CEO of the country's largest supermarket group, he brought a different approach to local government, and has been re-elected three more times. He sees the city as 'all one family', and is a believer in 'management by walking around'. If he spots a problem he is on the phone to demand action, and for example came up with a solution to the flooding problem after four hours of walking along the river. His watchwords are 'Just do it'. With a business background he knows how to negotiate and how to undertake public private partnerships, but he gives much of the credit to the superb team he has built up.

Social capital

Whereas 'market capitalism' is very much about consumer choice and buying where it is cheapest, what might be called social or human capitalism is about making the most of human potential. Egalitarianism prevails along with a friendly and informal approach to how things are run. The message can clearly be seen in the exhibition in the City museum on how industrialism has evolved in Yugoslavia, which was the pioneer of 'workers' self-management' under President Tito.

The respect for other people can be seen in the cleanliness of the streets, and the pleasure people get from eating good fresh locally sourced food and drinking the excellent local wines. People living at high densities have to get on with each other, and this may be helped

by the relatively low level of immigrants, perhaps 15% of the population were born elsewhere. However there is a danger that schemes that win architectural competitions, and that are then occupied by young families, could suffer from neglect over time. Also the apartment owners may not be able to cope with the costs of maintenance over time, while the social housing we saw appeared to neglect the public realm.

With a stress on ensuring that each neighbourhood has some cultural facilities, such as a library or community centre, and a delight in poetry, popular culture prevails. Indeed there are eight major dialect groups, so no wonder the use of English is so widespread! When asked to explain Slovenia's success, the head of planning Miran Gajsek told me it was 'Austrian hard work combined with Mediterranean improvisation.'

Conclusion

Slovenia clearly is 'beloved' by its people, and deserves to be much better known. What strikes me is not just that 'small is beautiful' but also that is can be extremely successful in economic, social and environmental terms. Reflecting on Vienna in Austria and Aarhus in Denmark made me see the value of losing an empire, and gaining a national or regional identity. It also showed the importance of municipalities with Mayors who can make things happen, not just beg to government for resources. The payoff comes in harnessing the intelligence and energy of young people through productive work, a message we could well do to learn.

Grenoble, France 12/17 – Rebalancing university cities

Three days in the historic university town of Grenoble with a group of academics, council leaders and others from Oxford was a truly memorable experience. The colloquium also provided a fantastic opportunity to consider what makes a medium-sized city 'great', and to learn from their pioneering LIFE programme about effective cross-disciplinary research. But the three days as their guest also raised the issue of how to promote equality and how to use spatial planning to make cities work better for all.

A great 'metropole'?

Grenoble is like Oxford in many ways. With a population of around 160,000, but part of a metropolitan area twice that size, the city grew rapidly in the early 20th century on the back of industrialisation. It turned from glove making to industries based on hydro power, and Grenoble became one of France's main 'high tech' centres, for example inventing reinforced concrete. The university became renowned for technological training and research. It boasts one of France's largest architectural departments, who were our hosts thanks to the energy and genius of Stéphane Sadoux who runs the unit there.

Also like Oxford, the city is long and thin, but bordered by the real barriers of mountains, not the artificial ones of local authority boundaries and a Green Belt. Some congestion and pollution is consequently inevitable, and creates real health problems. Grenoble was the first city in France to reintroduce trams some thirty years ago to get cars out of the centre. With an extensive tram system of four lines, integrated with busways, the city has sought to tackle pollution at source. The high-speed railway gets to Lyon in half an hour, and puts Paris just three hours away, cutting the need to use air transport.

Green Mayor is going further in banning cars from the centre and making cycling easier. The Metropolitan Council closely monitors air quality and restricts commercial vehicles on the most polluted winter days. Even then, cars still account for 55% of trips to work, with public transport carrying 25%, and bikes only 5%. So at the start of an event with some 30 speakers, the Mayor, Éric Piolle explained how the City was taking a holistic and integrated policy that brings together people and place. For example Grenoble was the first to employ 'health mediators' at day care centres and schools. It is innovating in building techniques, for example using rammed earth. The Mayor believes 'housing is the central pillar of health'. The City has won awards for building one of the first Eco Quarters in France at De Bonne with 900 apartments on 15 hectares, and is now aiming to do still better at ZAC Flaubert.

The President of Grenoble Alpes Maritime (which covers a similar area to Oxfordshire) stressed the importance of spatial planning to mobility, air, economic development and food, and hence wellbeing. The Chancellor of the University and Director of the Architecture School both saw the solutions at the interface between disciplines, hence the importance of bringing institutions together. Their university is tackling health in the urban environment through collaboration between cities and universities on societal issues, and Grenoble sends its students to England to learn about garden cities.

This ambitious programme, which brings some 100 researchers from ten different departments together, is driven by the knowledge that conditions are inter-related. For example poverty and polarisation is induced by lack of finance, and multiple morbidity imposes high costs on the health service. People in marginalised communities have double the risks of ill-health, as diseases are clustered, and their causes can now be identified through trans-disciplinary mapping. Solutions include active travel, green space and the

production of healthy food, and the co-location of services in community hubs. Municipal health plans translate the findings into policies that create real 'eco cities'.

One of the greatest challenges is that the population is ageing everywhere, as the Director of the Oxford Institute of Population Ageing graphically showed. Furthermore the greatest demands on health care are made by the very old. Consequently we must ask what kind of places do we want and how we can live better with perhaps 50 years of 'retirement' to look forward to. In Grenoble the numbers of elderly are increasing by 1% a year. Challenges such as isolation could be tackled through apartments with shared services, renovation to tackle the problem of fuel poverty (which afflicts 15% of residents in Grenoble), 'human powered mobility', and the mobilisation of more volunteers to combat isolation. An 'energy transition plan' can simultaneously tackle the issues of poverty and ill-health caused by air pollution, which kills 20,000 a year in the UK, or ten times the numbers killed on the roads.

Health can also be improved through greater use of solar panels instead of smoky wood fires, local energy systems fuelled by municipal waste, and incentives for low-polluting cars combined with locating car parks on the edge. Emissions can be limited through thermal retrofits but also be creating 'cooling islands' with plenty of vegetation to bring down extreme temperatures in the Summer.

Rebalancing our cities

With people living much longer and no longer working close to home, much more has to be done to reduce the disparities between different sides of a city, as well as between the relatively rich and poor. Both Grenoble and Oxford face huge spatial inequalities, as poorer people end up in areas with high levels of social housing where they can feel trapped. Regrettably we heard that in the UK cutbacks to local authority finance have led to the closure of the very childen's centres, social care and services such as Dial a Ride which are most needed. A fragmented structure makes it harder to join up services, and tackle the causes and avoid 'fire-fighting. So where there new developments, it is all the more important to innovate, as the NHS Healthy New Towns programme aims to do. But how success should be measured was one of the questions arising from panel discussions where cross-country collaboration would be really useful.

Everyone agrees that team working is vital, particularly in tackling the causes of inequality. Segregation creates stress, which not only cuts life spans but also leads to violent behaviour. After the conference, visiting the vast 1970s quarter called Villeneuve, or New Town, I was depressed by the sheer brutality and anonymity of many of the buildings. Not surprisingly few of the students at the large Architecture School based there choose to live nearby. Attempts are being made to humanise the area, for example cutting slices out of the long slab blocks. But a beautiful park, a tram stop or a modern community centre are not enough to give people hope for a better life. The High School had been set on fire a few months earlier, and there is talk of racial conflict.

Working for the common good

Grenoble would not be a city without a great university and transport hub, but surely the real test of a great city is whether it works for all? The challenge now is to get to the 'roots' of problems, such as health and deprivation, while rediscovering the ideals of the 'Garden City' (Stéphane Sadoux's passion). The great challenge as people live longer, and come from diverse backgrounds, is how to create and maintain urban neighbourhoods in the face of limited public finance.

One solution is to pull down the worst buildings, and create places that offer better lifestyles so that cities attract and retain wealth creators. Grenoble pioneered one of the first Eco

Quarters in France 15 years ago at De Bonne, in the heart of the city, which has won many prizes. It is now developing several thousand new homes at ZAC Flaubert on the tram line to Villeneuve. This is a public private partnership where the city is only allowed to invest 30-40% of the costs, the rest having to come from private investors. Serviced land is sold to builders at prices that depend on the use. The new quarter will halve energy consumption through a 'circular economy'. An old railway line forms the spine of a new park, and extensive planting will keep temperatures down in Summer, while the new school is being cooled by underground water. There will be a market garden on top of a car park.

However as one of the British speakers pointed out, there is a danger of building obsolete cities that cannot adapt to changing lifestyles and patterns of work. For example of 50,000 pieces of research into autonomous vehicles only 16 looked at the interaction with pedestrians, and the new cars may be unsafe in the centres while unable to move in the suburbs. While we cannot know the future, or the impact of different technologies, surely we can build and maintain urban frameworks that encourage collaborative lifestyles, whether it be through street cafes in the heart of the city or arts and community centres in the suburbs. Resources will never be enough, so we have to share knowledge and experience, as this colloquium did so well. Looking and Learning pays dividends. All who took part will want to strengthen the links between these two potentially great cities.

Aarhus, Denmark 10/17 – Developing a cultured and sustainable city

Returning to London from the Academy of Urbanism's superb Congress in Aarhus, Denmark's Second City in a country the size of Scotland, I realised I had not seen a beggar, a fat person or any litter for six days. Prices may be twice as high as in the UK, but everyone looks extremely happy, perhaps because they earn so much more and housing has been relatively affordable. This made me wonder what culture really is, how you create a learning city, what co-housing can contribute, and above all, how cities can provide the infrastructure for smarter growth.

Capital of culture and collaboration

Aarhus has been one of the two 2017 European Capitals of Culture, and has hosted a packed programme of events. It accounts for half of Denmark's architectural exports, including leading firms such as CF Moller, so it is not surprising that there are some truly exciting buildings and open spaces. But more important to 'Rethinking the City' is a culture of cooperation, which compensates for the lack of natural resources.

So bike use is prevalent, and Jan Gehl contrasted his failure to convince London to adopt Danish principles in taming cars, whereas the Mayor of Moscow took the necessary steps immediately. Culture is about much more than fine art galleries or civic buildings. The differences came out when a former Alderman, Torben Nielsen, showed me around their splendid 'library', which is effectively a 'machine for intelligent living'. Technology is used everywhere, from processing books to parking cars underground. This frees people to operate where they can add most value, for example working with children.

Similarly the 'library' has a section full of prams and small children, but no children's library; when some older people had told children to be quiet, it was they who were reprimanded. The building combines working and studying, with offices for major firms like the lawyers GLA Piper, as well as for one man bands, like my host, the dynamic former Alderman behind the project. He explained that the City started with a budget and then got three different groups to work up briefs before appointing architects who shared their vision. Open for two years, this is culture in action.

Learning cities

Denmark works well as a small country because high levels of pay lead employers to automate wherever they can. In turn this creates demands for skills as well as producing a lot of exportable products and services. In a city of 330,000 residents there are 50,000 students, and once attracted they want to stay. The City Council employs 20,000 and so can have much more impact than its English equivalent. Thus Bristol, with 50% more residents, has less than a third of the staff, and has had to make savage cuts to bring the numbers down to 5,000.

Aarhus prospers because it has built up a leading university, the largest in Denmark with global ambitions. The new regional hospital will effectively create a new town of 40,000 people on the edge, linked to the centre by the new tram line. As the Mayor and other speakers explained, the City listens to its citizens, and then acts. So all along the former dock areas, fine new buildings are emerging. These help Danish consultants to secure work in the rest of the world.

Innovation is also taking place at the grassroots, as the many social entrepreneurs who spoke exemplified. For example, Aarhus may have a cold climate so it has created a huge indoor 'street food' centre by the bus station, where young people congregate in their hundreds. Nearby artists have created temporary installations, as the city reconnects its centre back to the waterfront. Creativity and learning go together.

Co-housing and co-creation

Denmark has prioritised well-insulated and spacious housing for decades, but a recent change has been the return to living in central areas. This has been helped by the prevalence of cooperative associations, including 'co-housing', where groups commission their own homes and share common facilities provided in this way. In a city such as Aarhus over a quarter of the homes are run as cooperatives, and it certainly removes many of the risks of development.

We met people running neighbourhood associations for the common garden, in one case some 200 units in two separate blocks. The City funded some improvements so long as the residents took on the job of looking after the shared space. The shared space bring people together, and help new comers to integrate. It also has created places of beauty and calm, natural spots for 'Hygge' – the cosiness or comfort that comes from sharing coffee and cake.

By bringing nature into town, the city is also helping to create a more balanced community, and one where people can spend less time travelling to work, which gives them more time for their families or hobbies. As a general rule housing developments are expected to provide 25% of social units, which should help avoid the polarisation that happened in past housing developments on the edge of the city. One housing association, Ringgarden, promotes sustainability as 'creating a balance between man and nature' through measures to save energy and community gardens.

Living the good life

People are encouraged to come and live in Aarhus. You are free to register with housing associations and get put on a waiting list for one of 45,000 properties managed by the associations. Students and those working for the municipality can get priority, along with certain other groups. Hence renting is not stigmatised, and though some of the larger housing schemes are now seen as 'problems' in general areas are quite diverse.

The rules provide considerable freedom, for example in passing tenancies on, and enable residents to involved in how where they live is managed. Housing associations support cooperative life styles. Though co-ops are common in Denmark (as many as 40% of housing units in Copenhagen, apparently), some are being broken up as people buy their own home, while the co-ops have been encouraged by the government to become more commercial. Now that co-housing is starting to take-off in the UK, links with Danish housing associations could become really useful.

Housing associations are supported in developing new housing by the Municipality acquiring land on the edge of the city, and then making serviced sites available. The sites are divided into both large and small plots, which makes it possible for households or cooperative groups to develop their own homes. The municipality's website makes it very easy to see what land is available.

Infrastructure first

One secret of Denmark's success lies in the way the state has controlled land with a land value tax since 1924 based on the market price of land, revalued every two years. Land tax

is payable to the local authority and county based on a thousandth share of the value of the land. The tax goes first to the government, and supplements the income tax, which is then returned to the municipality based on a formula (as in Sweden). The result is a much fairer society in which natural resources are used more carefully (though problems are starting to rise as developers bid up the price of land).

So the municipality of Aarhus buys land for future growth on the edge of the city, and leases it back to the farmers. The Expropriation Law allows the state to acquire land in the public interest, such as for roads, schools and playing fields at existing use value. The creative role of Aarhus was most evident in the way that housing and offices have been developed overlooking the Harbour. The City took over the land from the Port (which it already owned) at a negotiated price. It then drew up the masterplan, and prepared the land so it could be developed as a series of parcels, benefitting from the views over the water.

Taxes in Denmark are high, and the largest taxes are on income. The City (as in Sweden) receives a share of the income tax paid by people working in the city, and so has a great incentive to ensure the city prospers. Rates are split, with the larger half based on the amount of land used, and the smaller amount on the value of the buildings. This encourages the good use of land, and there is less of a problem of developers or landowners sitting on land waiting for values to rise.

Conclusion

Danish cities reap the benefits from smarter urbanisation, and so can think 20-30 years ahead, rather than worrying about the next government cuts. They know that a high quality of life will generate the high paying jobs needed to support a lifestyle that is streets ahead of equivalent cities in the UK. Friendly groups of people help compensate for the cold and windy climate.

Productivity may be low, but so too are working hours, with lots of time off for holidays, often taken in sunnier climes. Of course there are also drawbacks in living in a relatively small Northern country, however good the streets may be, which the books The Year of Living Danishly, and better still, The Almost Nearly Perfect People bring out. There are much stronger social pressures than the English are used to, and public authorities have got into financial difficulties in the past. But Denmark has reinvented itself, and so the Danes have a lot to teach us as we think about a role outside the European Union and struggle to tackle inequalities.

Porto, Portugal 5/18 - Reviving an historic port

Spending a week in Portugal on a Rail Discoveries holiday made me realise how much investment has been made over the last few decades in some of the poorest countries, and how far the UK is lagging behind. But despite the benefits that tourism can bring, for example in upgrading airports and railway termini, historic cities like Lisbon and Oporto raise the challenge of how to spread the benefits around, and trigger growth for all.

Waterfront city

Oporto or Porto has ancient origins, but developed in the 18th century and later as the place for shipping out the fortified wine known as 'Port' that the English liked to drink after a good dinner. The grapes are grown in the Douro Valley, some three hours away, but names like Sandeman and Taylors dominate the old industrial waterfront. Today, like many cities, industrial buildings became redundant as did many of the narrow houses. A survey in 2005 found that only 4% of the buildings were in an acceptable condition, and half were in disrepair. Ten years later 70 % are said to have been improved, and the waterfront has been transformed.

Oporto, like Lisbon, is extremely hilly and there are six fine bridges, two built by Eiffel out of iron. The river is full of visitors on sight-seeing boats that look like the old caravels that once carried barrels of port. Part of the waterfront on both sides is full of restaurants and bars that also snake up part of the steep narrow streets. The City won the award of European City of Culture, and no doubt this boosted efforts to make the most of the city's main feature.

Transit hub

To overcome the hills, a system of trams was introduced in the late 19th century, and some heritage trams still run, including a line along the quayside. A modernised funicular from the waterfront to outside the main theatre, connects with another tram, though services are infrequent and crowded. There are fine stations, though nothing as grand as the Eastern Station in Lisbon on the high speed line between Lisbon and Oporto, which symbolises the investment that has gone into connecting up the cities. Clearly railway stations are still important gateways.

The central streets in Porto have been delightfully pedestrianised, with intricate patterns in the pavements that are a pleasure to walk on. The streets are also memorable because of the extensive use of decorative tiles on the facades of most of the buildings. There are also some fine old shopfronts, though too many seem to be selling the same tourist knickknacks. Suburban trains connect up the surrounding settlements along with spacious roads, no doubt part-funded by the European Union.

Exodus of residents

Unfortunately improved transport links tend to benefit suburban development most. High prices and cramped conditions in the old buildings that dominate the centre have led many to flee the city. Whatever the figures, there is an overall impression of too many empty buildings, with sometimes only the façade remaining. As the sites are cramped and the floor plates quite small, attracting investment must be difficult.

With fewer residents food shops seem scarce. Tourists do not support the kind of shops and services that residents want, and there is an ageing and relatively poor population. Apparently the main university may well lie outside the city, and so the American formula for

regeneration of 'meds and eds' does not seem to work, and it would be hard to find large enough sites in such a hilly city.

UNESCO World Heritage site?

The centre of Porto has won world recognition. Tour guides enjoy stressing their city is both ancient and recognised for its distinctive character. But character must be about more than facades and streetscapes. We were told that Oporto is special because each neighbourhood has a distinctive role, with, for example, all the health facilities close by each other. Certainly there are clear symbols on one of the free maps.

But having found our way to the street marked as an Art Point on a wet Sunday there was not even a café to be found, and certainly no obvious signs of creative people at work, or even interpretative signs. Indeed the main street was quite empty. This made me question quite what should be expect from a place that achieves UNESCO recognition, or more modestly wins the Award of Great European City from the Academy of Urbanism. Surely we should be looking for a living heritage, where old buildings are put to good use, and not just retained as facades or museums?

Zurich, Switzerland 11/18 – Assessing a major city

Zurich is regularly ranked as one of the best cities in the world to live and work by organisations such as Monocle and the Economist Intelligence Unit, and for good reasons. The city has traditions of both innovation and cooperation (for example home to Zwingli, Lenin, Einstein, and the original Dadaists). Though it is notoriously expensive, local wages are also quite high, so the main disparities are in wealth. An exemplary public transport system, and the major role played by housing cooperatives help keep the city in balance. The city is run by a left/green coalition, and in recent years rules have been relaxed, for example on opening restaurants, so that every space seems fully used.

More than 31% of residents are not Swiss and the nation is based on diversity, self-reliance and collaboration in the face of much stronger neighbouring countries. Rules on immigration are relatively strict. EU/EEA foreigners are only granted a five-year residency permit on the condition of gainful employment. Children must conform, for example by walking to school. Finding affordable housing is a significant challenge, but if employment, residency and housing can be solved, Switzerland and Zurich in particular, provides a very inclusive, liberal environment.

Post-industrial city

Zurich is the largest city in Switzerland with a population of 425,000 in an agglomeration of 1.4 million and is German speaking. Some 40% of construction has taken place in Greater Zurich. The city's development is rooted in being a 'free city', with no king or aristocracy. Instead medieval guilds transferred the cooperative practices that had enabled people to survive in the mountains. As the largest Swiss railway junction, it attracted industry in the 19th century. The great range and quality of city centre shops and the excellent transport links have in turn attracted tourists to base themselves in the city, and enjoy its cultivated, if expensive, facilities. Its neutrality and banking practices has made it one of the world's leading centres for managing private finance.

Zurich was traditionally renowned for its engineering industries, such as Brown Boveri, but was hit in the 1990s by the closure of traditional engineering works in the Northern part with the loss of some 40,000 jobs. Almost the whole industrial area has since been redeveloped for mixed uses, along with some imaginative reuses of old structures. Thus, part of a former set of railway workshops is being developed by Swiss Railways to provide production space for businesses serving local needs. Similarly, a former ship yard is now an arts centre, while a former turbine factory contains retail as well as housing and commercial space.

Distinctive character

There is a marked contrast between 'public realm' in the form of adopted streets, which tended to be utilitarian and lacking in planting or street furniture, compared to private courtyards (open to the public) which were well-landscaped (sometimes lavishly so) and cared for. A repurposed railway viaduct provides a running and walking route with smart artisanal and fashion shops in the arches. Similarly, there is a memorable riverside walkway system with lidos old and new. People look very relaxed and spend a lot of time outside in the Summer. The new offices that have been built alongside stations by international Starchitects could be anywhere, but the housing areas all have lots of character. Like other Swiss cities the views out to lakes and mountains make the city memorable.

Rented housing

An exceptionally high-quality public transit system, with frequent trams, makes it unnecessary to use a car. Housing is generally mid-rise around streets not towers. Most people live in rented apartments, with Switzerland having one of the lowest rates of owner occupation. Demographic change, an aging, but increasingly mobile and independent older population, more single households, patchwork families and a more diverse urban population are key drivers for innovation in housing, such as cluster flats.

The City's policy following a referendum is that a third of housing should be affordable or 'Cost-Price' and over time coops are some 20-30% cheaper than private rented flats (which helps as people become older). As well as reusing old buildings, there is a commitment to cut energy use, most of which is from renewable sources, especially water. For example, the housing coop *Mehr Auf Wohnen*, which means More Than Housing used spare heat from a nearby bank of computer servers or data hub, and restricts people owning cars.

The housing cooperatives have used local architects and extensive consultations to create distinctive places to live and work that are future-oriented. The shops that occupy the ground floors provide services like laundrettes used by the residents. Coops are supported by City Council policies for the provision of sites, and a commitment to increase the proportion from a quarter to a third of all housing.

Integrated transport

As well as being very walkable, with no barriers and few signs, Zurich has the most frequent train service in Switzerland. Most residents live in the middle area, and benefit from the very high quality integrated and punctual public transit system Modern trams go everywhere and are very frequent, and hence are used by everyone. There is an abundance of "shared space" and an extensive pedestrianised network in the Old City. Even though non-locals may occasionally find themselves straying into the path of a car, the system appears to work very well. Cars, cycles, trains and people simply go about their business in a natural way and no fuss.

Consensual planning

Zurich's success has been attributed to its consensual approach to planning. Zurich's plans are based on a Spatial Development Strategy with eight sub-strategies ranging from safeguarding space for business and the knowledge industries to planning the city and region together. The Strategy 2035, produced in 2015, seeks to answer three key questions: What will we live on today and tomorrow? How do we maintain our quality of life? How do we organise ourselves?

The Spatial Development Strategy for 2020 aimed to safeguard business, and secure sustainable growth by growing the city and the region together. It has also sought to safeguard space for knowledge-based businesses, while achieving densification that is both socially and ecologically acceptable.

Environmental protection

A national referendum in 2013 resulted in stricter restrictions on Greenfield development. All the surrounding area is protected as forests and mountains. A high degree of political autonomy – including tax-setting powers – creates a competitive climate between local governments. These factors combine to encourage inward development and densification within existing settled areas. At the same time, high environmental standards, and demographic changes (ageing populations, more singles and a greater diversity of households) are leading institutional landlords, including cooperatives, to redevelop many established neighbourhoods.

Dublin Ireland 7/19 – Balancing diverse objectives in transition

One of the delights of Ireland is the enjoyable conversation and gossip. It was even one of the four defining features of Dublin's shortlisted bid to be World City of Design. But talk is changing, as Dublin has become part of the global economy, while the former Docklands is like a Continental city, complete with all the main banking and consulting names, and is sometimes referred to as 'silicon docks'. From hotels run by Germans to Eastern Europeans announcing what is for sale on Ryan Airways, or passengers on the trams looking only at their mobiles, the atmosphere has changed. This made me consider what lessons can be learned from Dublin's renaissance, having last been in Dublin to judge the Grand Canal Quarter for an Academy of Urbanism award five years ago, which is on the DART line and on the South side of the River Liffey. This time I travelled almost from end to end on the two LUAS tram lines, as well as walking across the city centre, and went to look at how the new town of Adamstown was faring. My visit was thanks to an invitation to speak at a high level policy workshop on Transit-Oriented Development for NESC, Ireland's National Economic and Social Council.

A city in transition

There are said to be over 20 tower cranes putting up new buildings, and the scale of development is phenomenal. The centre of Dublin has undergone a transformation since I spent a year in 1970 working as a management consultant for McKinsey and Company, advising on the reorganisation of the Irish Electricity Supply Board (ESB). For example the old bus depot has been turned into Temple Bar, initially as a 'cultural quarter', but now as a world renowned place for partying and drinking. The population is now much more cosmopolitan, highlighted by a giant Gay Pride march taking over the city centre on the Saturday.

Much of the change has come from the growth of international oriented offices. The big companies are self-contained worlds. 70% of the 2,500 staff who work for Google are 'international', and the average age is 29. When I was shown around their offices I found the great majority are employed selling advertising. These provide some buyers for the many apartments on sale, with a 50:50 mix between housing and business space. Unusually, and thanks to advice from the local community, the housing in the Grand Canal Quarter borders the main streets, while the office blocks look out to water. But though some may be putting down roots, most are likely to be transient.

Traditional bars can still be found, and in term time are full of students, as Trinity College Dublin expands along Pearce Street and into the Docklands. There are memorable 'world class' townscapes – a theatre by Libeskind, two bridges by Calatrava, and a public quayside or 'campshire' by Martha Graham that will win design awards. The St Andrews Resource Centre employs some 200, and helps anyone who approaches them find a job or training. But though next to each other, the communities seem worlds apart. However as youngsters enjoy the water, jumping in from a nearby bridge to the consternation of major employers, or paddling kayaks, some of the old Dublin spirit is still alive. So too are the 'beggars' but today most of those are young, with possibly many from abroad.

A big question must be the future for the new economy, with both the domestic and multinational sectors having grown well since the financial crash ten years ago. Dubliners so dependent on finance and IT, heavily in debt, are very worried about the impact of Brexit. Ireland is the leading country in Europe for attracting Foreign Direct Investment, half of which is in the Tech sector, and the funding mainly come from the USA. according to a comprehensive report on the Irish economy from Irish stockbrokers Goodbody. Property dominates lending growth ten years on from the last crash. The Irish and British economies are closely entwined, while many of institutions, such as the legal system, have British rather than European roots, so the UK crashing out of Europe could have huge consequences, especially for borrowers in Dublin.

A connected city?

Dublin's population of some 570,000 is only a third of the metropolitan area of 1.8 million, and so there are at least three distinct 'nations'. The city dominates the Irish economy, and Cork, Ireland's second city, has a population of only 125,000, but with many more living in the surrounding area. Though three quarters of market housing is being built in Dublin, the great majority of the people who work in the city live in small towns and villages or suburbs that are highly dependent on cars. As a result the centre suffers from great congestion at peak times, despite some progressive investment in public transport, and also making the centre quite walkable, as there are large areas where traffic has been reduced. But the city has a long way to go to achieve what the comparable cities of Nantes and Copenhagen have managed over the last few decades through investment in public transport linked to development, concepts such as 'pacified public space', and plans for a new ring rail line or 'Loop' (as we learned in the NESC policy workshop).

The DART suburban railway along the coast was the first innovation, standing for Dublin Area Rapid Transit. This has been joined by the Red and Green lines of the LUAS, the Dublin tram system that connects suburbs up with the centre, using stylish French built trams. Both lines are around 20 km long with stations every kilometre, 67 in all, with services every few minutes and easy boarding from low platforms. On either side of the City both lines stretch out through the suburbs and low density industrial estates to new suburbs in green fields. The Red line extends out through the International Financial District of Custom House Quay, with its concentration of world and on to the Point, in a quarter that looks more like Hamburg's Hafen City than anywhere in the British Isles. This is now crossed in the centre by the Green Line, which goes out to the prosperous Southern countryside, having taken over an old railway line for much of the route. Both are so busy that the units are being extended to 50 metres.

A housing crisis or crises?

There are many different housing markets and communities. What was a working class docklands community has secured a splendid 'resource centre' in an old National School, but most of the old housing has vanished. The ground floors of apartment blocks have been given over to social housing, run by housing associations, thus enabling some to improve their situation, releasing what is left of the old cottages for new comers. But social housing is in short supply, and private rents have escalated, creating in effect three nations that could come into conflict. Apartments only account for a fifth of what is being built, and in the centre are often taken by better paid foreign workers, who largely rent and compete for the limited stock. Ireland was particularly damaged by the banking crisis 2008, losing many companies. Only 16 builders sold more than 100 units in 2018m who accounted for 35% of sales, and there are few with the capacity or interest to take over redundant industrial sites and develop neighbourhoods of any quality.

The new supply is only around 1% of the total stock, but with many unsold units, possibly because the prices are unaffordable to most. Hence the future is likely to lie in Private Renting funded by financial institutions, which of course suits those who do not expect to put down roots. A 'help to buy' scheme provides grants to first-time buyers of 5% and those seeking affordable housing tend to move to the countries surrounding Dublin, and to depend on a car to get to work. For those outside the new economy, finding a decent place to live is extremely hard, as saving for a deposit is now beyond most people's means, adding to the

stress of getting to work. No doubt the grand Georgian houses in the centre are often in poor internal condition, and the conditions are rife for 'slum landlords' to dominate. 10,000 are counted as 'homeless, living in hostels.

One possible solution that has been considered is to build new towns, but unfortunately the experience of the pioneering scheme at Adamstown is discouraging. When visited ten years ago, it looked very promising, with a far-sighted developer keen to apply Continental thinking. But the scheme for 10,000 homes was a victim of the property crash, and only a little over a tenth was completed. Stylish blocks of apartments were built to rent, and a fine four platform railway station opened up, less than 15 minutes from Dublin, (though without seats or toilets!). The stopping trains are only hourly and outside rush hours seem poorly used, while the station feels quite isolated. A community centre was completed recently and a 'temporary park' is to be opened, but the landscape is unwelcoming. Fences make it hard to walk around, and the schools hardly bring the communities together. Permission has now been given for the next stage, but there was little excitement in the air when I walked around. So even when land is provided at a relatively low cost, it seems that private sector new towns are unviable because development takes too long, and building is easier and more profitable elsewhere.

Control may be shifting

The Irish government seems to recognise the problems, with great aspirations. One benefit of being a small country in the European Union has been the scope for innovation. So Ireland has sought to regulate private letting by enabling local authority to act as intermediaries, though the results are said to be disappointing. Special Development Zones (SDZ) are designated where once permission has been given, with oversight from a national Regulator', there can be no appeals. A Land Development Agency has been established to mobilise sites that are standing idle. There are grand plans for projects such as Dublin Metrolink to connect the airport up with the city and beyond. There is interest in concepts such as Transport Oriented Development, with an excellent report from NESC and a most civilised policy workshop brought representatives of many of the public bodies together. The Office of the Planning Regulator, the National Transport Authority, and Regional Assemblies all seem promising.

But will Dublin have the political courage to follow the examples of advanced cities such as Copenhagen and Nantes, whose experience was presented, or to take the concerted action needed to 'share' land value uplift, as I suggested? Will it shift from building roads that suit those who earn most to making public transport the preferred alternative, (which may sound like socialism)? Will cautious local authorities prepare the development briefs and frameworks that are essential to stopping land values from escalating? Discussions with two leading figures in the private sector were cynical. On the one hand with high construction and financing costs, they will argue there is little scope for Land Value Capture, especially when land has been bought at a high price. Property owners, whether public or private, will look out for their own short-term interests, whatever national policy says. On the other hand the public sector may lack the skills and appetite to be proactive, and in the past corruption has distorted decisions on individual sites. Strategic spatial planning has not been able to steer development where it is most appropriate. Too often planning is left to architects, who can visualise the potential of individual sites, but find it harder to create the development frameworks that are needed.

Conclusion

Most thinking people can recognise the importance of an approach that balances different concerns, from diversifying the economic base to protecting natural capital and improving life chances for the worst off. Some even understand the value of making the most of existing

assets, such as railways. But going from grand objectives, even when measured, to shared visions that can be implemented over decades is much harder. However on reflection I was cautiously hopeful. Ireland's unique position with one foot in Continental Europe and the other in the United Kingdom, and as one of the fastest-growing English speaking nations, could make it the source of innovation in 'place-making' or 'smarter urbanisation' that the whole world badly needs. Certainly the NESC workshop showed it was possible to bring senior people together in a productive way that would be quite difficult in England.

Ireland has always been keen on education and has the ambition to learn from others. The challenge of Brexit could even lead to rethinking the way property is taxed and the proceeds used, for example through some form of site valuation tax or charge, as in Copenhagen, for example. The hope must be that Dublin's spending spree has enabled the city to compete in an international league that includes cities like Copenhagen or even Zurich. The city's youthful image for fun will score, even if conversation is now more likely to be via Facebook and Twitter than sitting in a smoky bar.

Sarajevo Bosnia 08/19 – Moving to a market economy and sharing land value uplift

Returning to Sarajevo for a research conference almost fifty years after I had worked there as a management consultant for McKinsey and Company raised some fundamental questions over how the countries of Central and Eastern Europe should use their recently won 'freedoms' to build a more sustainable future. I was struck by how cities that were almost destroyed by civil war could recover their identity and character, but also how difficult it would be to share the new wealth with the wider population.

A Balkan tragedy?

Sarajevo was under siege for 1425 days between 1992 and 1996. With troops firing on the city from the surrounding mountains, the people lived in a state of siege, short of food and any security, the longest siege of a capital city in modern warfare. But the experience was not new. From domination by the Turks for five hundred years, and then as part of the Austro-Hungarian empire for some fifty years, before becoming part of Yugoslavia and then the Soviet bloc, Bosnia and Herzogovinia has fought for independence. But it is hard to be independent when you are so small (3.5 million) and composed of different communities.

Sarajevo has a fascinating old town where East meets West. Located among mountains with lots of water power, Muslims, Christians and Jews have co-existed for centuries Sarajevo has a fascinating old town where East meets West (left). Located among mountains with lots of water power (top right). Muslims, Christians and Jews have co-existed for centuries (bottom right).

The country is not only split by religion but also by mountains. These make communications difficult but also foster diversity, and Sarajevo was rightly a candidate for European City of Culture. Thus there are several scripts, and in a notable square a Moslem mosque, a Christian Church and a Jewish synagogue stand next to each other. Known principally as the place where Archduke Ferdinand was assassinated, and therefore the spot that ignited the First World War, the city lies in the contested strip of the Balkans, where conflict has been part of life for centuries. Yet as the great local write Ivo Andric points out in his Nobel prize winning novel *The Bridge on the Drina*, people from very different background and cultures managed to coexist. The results are clearly visible in the fascinating streets and public places that have been rebuilt after the civil war, many still showing where they had been struck by shells.

Today the atmosphere is very relaxed. A Western visitor is impressed by the contrasts between the young Muslim girls in their stylish outfits and their Western dressed counterparts mingling together in the lively atmosphere of the Old Town, while black garbed tourists from the Middle East look on. Cafes serving 'Bosnian' coffee and dishes like Burek and the local Cevapcici grilled sausages contrast with the bars on the edge of town, with their loud music and Western ways. In the town of Mostar tourists gather to walk over the ancient bridge, the first part of the old town to be rebuilt after hostilities ended, but with many buildings still derelict. The sounds of the Christian church bells compete with the cries of the Muezzin from the many minarets. Somehow the ancient character has survived a brutal civil war.

Linear city

Sarajevo's position along a valley between mountains has produced a relatively sustainable urban form. One of the first urban tramways, built by the Austrian rulers in 1885 as a test line for Vienna, now runs for 14 miles with 28 stops, and with turning circles at each end. The

old-fashioned tram fleet includes cast-offs from Washington, the Czech Republic and Amsterdam. Trams seem to run every few minutes on the main route, which can be quite bumpy in parts. A one-way tram ticket only costs £1.50, and ticket inspections are frequent. The high density and mixed nature of the urban population means that public transport is very busy. On either side of the spine line are all the main attractions, from a City Hall built in a Moorish style, classical museums to modern office blocks. At one end is the Old Town, where coffee drinking predominates, while at the other, where the conference was held, is an unplanned kind of new town just off the airport runway, with lots of noisy bars.

But travelling out to Mostar, some two and a half hours away over the mountains, it was clear that development was sprawling everywhere. So the high density blocks of flats being built in the centre are competing with new suburbs and the pleasures of living in the country. Consequently, as in most cities, congestion is increasing and air quality is suffering. When I had previously worked in Sarajevo the smog was so dense it was impossible to see anything, thanks largely to buildings being heated with low quality fuel oil called Naptha. Today the air looks cleaner but is polluted by the private cars of those living elsewhere.

The large modern bus and train stations adjoin each other, so it should have been easy to create an integrated transport service if privatisation had not got in the way. It appears that those who can, use their cars. Unfortunately the train line, which has been upgraded with Talgo trains, only runs an early morning and late evening service between the two towns, which makes it impractical for the visitor to use, and so it is a neglected asset.

The company our team from McKinsey was advising, Energoinvest, is still building power plants, transmission systems and now 'smart city grids' in over a hundred countries. But the successful Yugoslav model of 'workers self-management' has been replaced by Western investment in foreign owned businesses, that now occupy the stylish office blocks that have been built along the line. There is no obvious division between neighbourhoods by religion, but undoubtedly there are growing differences in the kinds of housing people occupy. My fear is of a growing polarisation between city dwellers and those living in the rapidly growing suburbs. How could a city government meet growing expectations when the prevailing values are to maximise private wealth?

Capturing land values

The conference had been organised by a network of researchers supported by a grant from the EU under the COST scheme, which stands for European Cooperation in Science and Technology. University based researchers in some 27 countries are collaborating over a four year period through a network called PUVACA, which stands for Public Value Capture of Increasing Property Values www.puvaca.eu. The event was a chance to review the philosophy of land value capture as well as to draw on case studies of experience in a variety of countries. 150 papers and 17 books had been reviewed, and the OECD has started an eighty country review of land value capture, now that cities everywhere are looking for new sources of funding for infrastructure.

Discussions revealed the need to go beyond looking for funds from developers and land owners to changing the way development is planned and property is taxed so that beneficiaries of public investment contribute towards the costs. A great deal depends on the context. Capital cities like Prague or Tallinn attracting international capital, while second cities like Brno or the rest of Estonia get little investment. In successful Western cities such as Bordeaux and Munich, where land values are rising at 15% a year, there is agreement over the need to control development for the public good. By contrast in what are politely called the Inclusiveness Target Countries which have overthrown the old Communist systems, even where the constitutions allow some form of property taxation, the prevailing views of politicians is to let the market determine what happens, and very little is raised.

What we call negotiation in Northern Europe is seen as corruption in the Mediterranean countries. There are no common principles or values to help finance the infrastructure that cities need. As a consequence, development is taking place in a fragmented and uncoordinated way, with little regard to the UN's principles of sustainable development and the New Urban Agenda. After the fall of Communism, private property rights dominated decision making. As people were able to acquire the flats they had once rented they were happy for a while. Though the UN's Urban Agenda has highlighted the importance of capturing increasing property values, as has the World Bank in its research into how to finance transport infrastructure, politicians pay little regard to concerns such as limiting car use, and upgrading public transport or the needs of the homeless. Instead they prefer iconic modern buildings that symbolise progress and appeal to their supporters. So grand projects such as Wilanow New Town in Poland are getting no developer contributions to social infrastructure and will suffer.

The approach taken by the City of Munich in Southern Germany was particularly interesting. The City has pioneered Socially Responsible Land Use Planning (SOBON) and is currently planning a new town to meet the demand for 5-6,000 units a year. Developers enter into contracts with the city before land is rezoned to cover both social and ecological impacts. One third of the value goes to the city to pay for infrastructure, and in all 50% of the uplift in land values can be captured. The city council employs more lawyers than planners, as negotiation is critical to success.

We also learned of the French experience, where local authorities can secure 3-4% of the value of the project in benefits such as affordable housing (14% in Bordeaux and 22% in Strasbourg. Ghent in Belgium is another good model where 12% of housing is social. Flemish cities can secure 20% social housing in new private developments and 40% on public land. Support is also provided in the form of lower transfer costs (1.5% versus 10%) and lower VAT on construction (6% vs 21%) . Intriguingly while the Flemish GNP per capita is amongst the highest in Europe, incomes in neighbouring French Wallonia are not so much lower thanks to people working in Brussels or getting social benefits. While developers have appealed against 'disproportionate obligations', the Courts apparently consider them acceptable where necessary to 'guarantee sufficient housing for low income or disadvantaged sections of the population.'

Conclusion

The potential for tapping land values is therefore fundamentally different in successful Western countries and in cities where politicians have little respect for professionals who threaten their positions, and where corruption is commonplace. But as Jonathan Manns and I pointed out in our contribution, in the UK it is only in the extended travel to work area around London, that is the Greater South East, where house prices have risen most and land values are high enough to be taxed without losing investment. Consequently instead of looking for universal public policies, it is better to enable local authorities to devise systems that suit the local context. However developers everywhere will resist paying upfront when values are only achieved when property is occupied after some years of hard work. They also will prefer providing benefits in kind that enhance the overall appeal of the development.

The research is already enabling experience to be shared. My hope is that promising conversations with researchers based in Dresden and Vienna may enable comparisons to be made with English cities that are also having to rebuild their economies and institutions, and that want to put proactive planning policies into practice to build both better and fairer places.

Kochi Kerala 05/16 – Developing one of India's hundred Smart Cities

One of Premier Modi's 'big ideas' for India is the promotion of a group of a hundred 'Smart Cities'. The hundreds of initial applicants have been assessed by what they have already achieved, for example in collecting revenue. But the second stage is to be judged in terms of the quality of citizen participation and their economic and environmental impacts, so the use of Information Technology is very much a means to wider ends. The first group of Smart Cities have predictably been leading cities such as Jaipur or Coimbatore in Tamil Nadu, and Kochi in Kerala came fifth in the scoring. However the real challenge of urban growth is to develop the hundred Metro cities, that is the third tier cities with populations between 500, 000 and a million. This would take the strain off mega cities like Chennai, which grew by 40% between 2001 and 2011, compared with an average of only around 15% for the six other largest cities in the State of Tamil Nadu. So what would 'smarter growth' look like?

Smarter cities?

Certainly established cities are likely to double in size over the next two generations. Further urbanisation is inevitable, as currently only 30% of Indians live in towns, whereas the world average is 50%. With rising expectations and educational levels, young people no longer want to stay in the villages, The three big questions for planners are where should they go, how can they earn enough to support both themselves and their families, and what can be done to raise agricultural productivity and incomes? The urban infrastructure is already overloaded, even before car usage rises to Western levels, and pollution levels in mega cities such as Delhi are among the worst in the world.

Even the 'garden city' of Bangalore is losing its appeal. India's motor industry now employs 27 million, mainly in the North of Tamil Nadu, and as the little Tata car/taxi is starting to replace the Tuc Tucs you see everywhere, rising car ownership seems inevitable. One of the highest economic growth rates in the world (over 7%) is largely benefitting the middle classes, and those who already own property. With growing families, especially among the Muslim households that represent a quarter of the population of Kerala, for example, the potential for conflict is huge as people compete for space. India urgently needs to learn how to avoid the mistakes of both urban sprawl and high rise tower blocks that characterise urbanisation in the USA and China. So 'smart cities' need to adopt very different growth models if they are to avoid unacceptable inequalities.

Smarter transport

Connectivity should be the starting point, as surveys show that congestion is a major concern. Returning after a couple of years to Kochi City, the commercial capital of Kerala, development seems to be happening everywhere. A new international terminal will allow the existing one to serve domestic flights, and will be linked up with the new Metro that is under construction. Interestingly the original fine building was built without delay or corruption, which shows it is not endemic. Kerala has benefitted from a progressive Communist government, which alternates every five years with the Congress Party. Competition for votes has brought about widespread land redistribution, and infrastructure is much better than much of the rest of India.

While there are sometimes said to be more potholes than roads, we drove generally along fine surfaces. The absence of pavements (as India seems to have invented 'shared surfaces) allows vehicles to overtake on narrow roads, but cyclists have to compete with cars. Work is far advanced on the first line of Kachi's overhead Metro line, and the first trains are being tested out. It has benefited from German funding. An integrated transport system will include upgraded water transport, funded by the Japanese who will also take over the main buses. Alas though an editorial in the Hindu while I was there called for India to learn from London on how to regulate buses, British investment is rare, (though advertising hoardings in English are everywhere!) How can public transport cope if housing development is so unplanned?

Smarter utilities

In India, where 40% of the world's under-nourished people live, the poor are losing out from growth. Some squeeze into shanty towns, known as slums, which are threatened with redevelopment. Or they live in villages that lack basic utilities. Erratic electricity supplies require investment in renewables, but no visible use is currently being made of solar power (except for the extraordinary 'solar farm' that powers Kochi International Airport). Water runs out in the hot summer months, as storage reservoirs have silted up, and tube wells in Tamil Nadu are no longer tapping fresh water, despite burrowing ever deeper. Proposals to extend the great 28km lake at the top of the Western Ghats in Thekkady are understandably opposed by those in Kerala who would like their own hydro system. They fear that a dam built by Colonel Pennycuik in 1895 to irrigate parched Tamil Nadu could easily collapse.

President Modi has complained that there are more mobiles than toilets. But there is little chance of connecting them to proper sewers, as there is not enough water to flush them. Food too, while seemingly plentiful in the markets, leaves many hungry. Some 40% is estimated to go to waste due to poor storage and distribution systems. At the start of the harvest the rice millers were refusing to take deliveries because the support price was too low. 'Haphazard development' is made worse by corrupt planning, reliant on private developers selling 'dream homes', which is leading to new housing going up where it is disconnected from public transport. This further overload the inadequate infrastructure, leading to private pumps and reliance on water tankers. Only 45% of households in Tamil Nadu have their own toilets compared with 95% in neighbouring Kerala. So there is huge potential not just for building better new homes but also for upgrading what already exists for example through 'composting toilets' that help replenish the poor land as well as sewers that protect the watercourses. Smarter cities need to avoid eating into well-irrigated areas, and to make much better use of natural resources such as water and solar power.

Smarter heritage

Maintaining India's special character also matters, particularly as far as earnings from tourism are concerned. Fine waterside warehouses along Bazaar Road, once used for storing spices, are still decaying, though supposedly protected by being in a 'heritage zone'. Several blocks been transformed as boutique hotels, including Xandari Harbour, developed by an American with Indian money, and the nearby Museum Granary Hotel with its fine jetty. Within the Old Town of Fort Kochin, elegant homestays, such as the Francis Residence, allow the visitor to sample real Southern Indian friendliness and the superb food, mainly vegetarian and fish.

Kerala benefits from the diversity of its communities (a quarter Hindu, a quarter Moslem and a quarter Christian). Alas there are now only seven Jews left to use the 18th century synagogue in Jew Town at one end of Bazaar Road in Kochi, but the old houses have been turned into a fine choice of shops. Elsewhere, different sects of Christian churches compete with their grand buildings (perhaps benefitting from funds intended to tackle the effects of the

tsunami?) However in the bid to be one of Premier Modi's 100 Smart Cities, Kochi scored poorly on refuse collection, which is a universal problem for Indian cities, and the city has responded by discouraging plastic packaging. The old water channels that the British built a century ago have become clogged up by development, and are no longer flushed by the tides. Though Kochi has dredged out its port, it is not making the most of its waterways (unlike neighbouring Alleppy with its extensive 'backwaters').

Becoming a Smart City

In Tirunelveli, one of the most ancient towns in Tamil Nadu, progress was less evident. The city is 56th in the national list of potential smart cities, along with many other similar sized towns. The population is currently just under 500,000 and grew by 15% between 2001 and 2011. Consultations have shown the main concern as accommodating traffic and dealing with water shortages. However the city is superbly located for further growth, as it is the junction of four railway lines and major roads. A year ago the City had said it was not interested, but there is now a Smart Cities officer, a former water engineer, with a small team based in the Municipality's fine new offices, supported by a consultant from Chennai. Public transport, a combination of old buses and ubiquitous tuc tucs, are rated as good. The superb railways, now largely electrified, concentrate on long distance passenger services. But there are only four to eight trains a day on the line that runs out to Chermanadevi, SCAD's local station, each with over 20 heavy coaches, and the potential for concentrating development around existing or new stations has not yet been taken up.

The second stage bid predictably tries to use IT to the full, with proposals for extensive CCTV cameras and water and energy meterage. But the most interesting elements are treating the historic core as a visitor attraction by removing traffic and creating a 'lakefront promenade'. A 250 acre new settlement within the 10 km limit of the city's boundaries, is also proposed, applying new technology. Discussions on the vision with some 3,000 stakeholders revealed the main concerns were congestion and erratic water supplies, and the City would like to clear out the waterways and build storm water sewers. But as the city grows and car usage increases from the suburbs, the quality of life in the centre could easily follow the path of mega cities, such as Chennai, where the air is virtually unbreathable and over-crowding is rife

Conclusions

So there is everything for the visitor except other tourists, as many have been scared away by the troubles in the Middle East, the recession in Europe, and competition from other places, such as in the Far East and Latin America. There is also huge potential for British investment, which so far seems confined to the involvement of the London School of Economics in the evaluation process. This is a great pity as there is so much potential for rebuilding the historic links between Britain (and indeed the Netherlands and Portugal). English is widely spoken and the ubiquitous signs and billboards are in English! Perhaps, given the widespread concerns about corruption and bureaucracy, there is scope for British investment in project management and development, as we share many of the same challenges!

Tamil Nadu 3/17 – Smarter urbanisation and rapid growth

On my fourth visit in as many years to Southern India, my main aim was to take forward the URBED Trust's project to help SCAD (Social Change and Development). I also wanted to visit some historic attractions in Tamil Nadu. I was struck by the huge untapped potential for rebuilding historic trade links to the benefit of both countries. At the time the Indian economy was growing at 7% a year, and with only 30% of the population living in urban areas, the big question is how to manage growth. There are great places to visit where white tourists are rarely seen, superb cuisine, and a generally peaceful and friendly attitude in a country where English is the second language, and signs in English abound.

Now the UK has to look beyond Europe after Brexit for trading partners, surely doing more business with one of the world's largest and fastest growing economies has to make sense? Both countries face surprisingly similar challenges, from upgrading worn-out infrastructure and building homes on a much larger scale to equipping young people with the skills needed in a global economy. Both countries have been far too centralised, and need to encourage initiatives that engage local communities. Having spoken to a range of local experts, from senior civil servants to urbanists and heritage practitioners, as well as students and staff at SCAD's engineering colleges and business schools, seven ideas emerged.

Quality not quantity

Rapid growth is simply not sustainable in the long-term if it reinforces inequalities and keeps the rural poor trapped. As in the UK, affordable new homes are vital. Yet while mega cities such as Chennai (formerly Madras) attract most investment, the potential of the Third Tier or Metro cities is being ignored. High tech companies in IT are lured to new business parks on the edge. Sprawling suburbs with high-rise towers that promise 'smart lifestyles' are eroding valuable marshlands and paddy fields.

With rising levels of car ownership (a third of India's motor industry is located around Chennai), congestion, air quality and stress are becoming insufferable. Pedestrians and cyclists are treated like 'third class citizens' in a world where reinforced concrete seems to rule, and the caste system still prevails. Indian cities need to learn from both the mistakes and the achievements of mid-sized European cities, for example in building quality new suburbs where children can walk or cycle safely to school, and people know their neighbours. Premier Modi's programme for 100 Smart Cities has put urbanism on the national agenda, but has not resolved the issue of implementation, and how to overcome resistance from conservative interests, such as small traders. Demonstration projects that offer ordinary people better options will therefore be vital.

Smarter travel options

Tackling congestion offers a major opportunity to make cities work better for all. An article in The Hindu of February 25th 2017 commented

'Haphazard real estate development and rent seeking is leading to a prohibitive cost of living. ...Public transport in Mumbai needs a complete overhaul ... and has not modernised its fleet in decades. The water supply continues to be diverted from lower and middle-income group localities to skyscrapers. Instead of investing in public transport, thus reducing the density of private vehicles, almost every transport policy at the city and State levels encourages private ownership'.

The situation in Tamil Nadu is equally poor. Buses are extensively used for travel between towns, but are over-crowded and suffer from a poor image. With houses along both sides of the main roads, there is rarely enough space for bus lanes. In Chennai, suburban rail services have been boosted by new elevated Metro lines, but only a small part of the city is served. Motorbikes are the popular option, adding to noise and confusion, as electric bikes have yet to be taken up.

Traffic in towns needs taming so that pedestrians and cyclists have priority. Considerable public investment has gone into improving road surfaces on main roads and motorways once renowned for potholes. But as cities grow, they will lose their appeal unless parking controls are introduced, and better use is made of local rail if only to improve air quality and make getting around easier. The railways have been losing freight traffic, and with little suburban traffic they depend on long 20 coach trains that run on electrified lines from end to end of Southern India. The stations are grand and orderly places, but are missing out on the potential for local traffic. As in the UK, large amounts of land owned by Indian railways are awaiting development, which would help provide the funding needed for integrated transport solutions.

Civic pride

Despite isolated achievements, for example conserving superb monuments and temples, Tamil Nadu's heritage is rapidly disappearing. Even in Pondicherry, where the French Quarter has been lovingly restored and is kept scrupulously clean, some 1,000 listed buildings have been lost in the last decade in the much larger Tamil Quarter. Expanding families are pulling down old homes to make space for new apartments, and dilapidated buildings are said to be a result of unresolved legal disputes. The streets are full, and rubbish piles up in neglected corners for lack of municipal care and personal responsibility.

What INTACH (which stands for the Indian National Trust for Art and Cultural Heritage) has achieved in Pondicherry since 1984 is credited to the employment of a team of 15 in a relatively compact city. There is also now a strategic plan for the city's future. Undoubtedly you need a critical mass of effort before a difference is visible, but a start could be made elsewhere by employing people to keep the streets 'cleaner and greener'. We saw fine mansions crumbling around Chettinad, where one has been turned into a superb hotel, with few signs of local action. Perhaps an Indian version of the National Trust is required to take over historic buildings before it is too late?

Healthier living

People are living longer, and large hospitals abound, including the fine new hospital SCAD has built South of Tirunelveli with help from the Irish government. But rates of infant mortality are still appalling. In part this may be due to poor sanitation and drinking water. It is also blamed on fumes from cooking in poorly ventilated village houses. On one of our train trips we enjoyed meeting some American artists who have developed and are selling a much safer and better stove. The more sedentary life for town dwellers is also encouraging obesity, and problems in later life such as diabetes.

Where once children expected to look after their ageing parents, they now often live many miles away. Mobile phones may bring some people together, but as in the UK there is a threat of increasing isolation. Cinemas have been redeveloped, and there are not enough spaces for casual meetings. New suburban apartment blocks built without streets have little sense of community, despite all the developers' promises.

New settlements and eco houses

Yet there are already some inspiring alternative models for a more sustainable way forward. Bangalore used to pride itself on being India's Garden City, though is now suffering from poor air quality. Trivandrum, the capital of Kerala, has many fine houses built by British architect Laurie Baker who developed ways to keep homes cool and beautiful through cross ventilation, and his ideas are being applied to slum renewal. Less than ten miles north of Pondicherry, we visited Auroville, a utopian community established for people from all over the world to live in harmony. Unfortunately some 50 years on it only houses some 2,500 whereas its founder, known as The Mother, wanted it to grow to 50,000 residents. The site is dominated by a grand edifice near an excellent visitor centre, but the casual visitor gets little idea of how people actually live.

A former Board member told us that despite the high ideals and arrangements for local governance with many Working Groups and an organisation based on 'intuitive intelligence', there had been conflicts, both with the existing villages and between different parts of the new community. Visionary architects had built homes for themselves, but the masterplan was largely unfulfilled. Within the Green Belt, less than half the land is owned by the Foundation (Auroville: a dream takes shape, 2016). The new settlement has not generated enough income for incomers to satisfy their demands.

Innovation with sun-baked bricks using rammed earth and a little lime, and extensive tree planting have turned what was once desert into a garden setting. But limits on private ownership and an 'economy based on exchange of services' have also made it harder to fulfil the community's original aspirations. The foreign pavilions have never been funded. The Earth Institute and Centre for Scientific Research have not yet influenced the mainstream of construction and development, nor is the experiment as well-known as it should be, though much can be learned through the website (www.auroville.org).

Smarter urbanisation and enterprise development

As in the UK, it is not enough to send every child to school, or for degrees to provide the way into good jobs. In some areas, children leave school still not being able to read or converse properly. There is no lack of ambition, but graduates lack practical experience in questioning established ways. Also there are simply not enough engineering or IT jobs to employ the many who graduate. While there is plenty of work to be done in creating 'smarter cities' local authority politicians are not trusted, or are seen to be 'money grabbing'.

In judging the many short-listed entries for SCAD's URBED Trust Award 2017, I was struck by the deep enthusiasm for recording and promoting the attractions of Tirunelveli, a large historic area ignored by British travel guides, included producing a powerful leaflet. Working in groups to prepare presentations gives students the experience and confidence needed for later life, and can generate fresh ideas. For example students in a water-starved area proposed a campaign in schools to promote greater awareness of the many ways to save water. They wanted to distinguish between water that was good to drink, or to wash in, from water that could only be used on the fields. Others showed how to use waste materials, such as fly ash from thermal power stations, to reduce dependence on traditional forms of concrete.

Yet students have to move hundreds of miles in search of jobs in the big cities, while local opportunities are missing. The exciting and innovative products exhibited by SCAD's electronics students show how much potential is waiting to be tapped. Premier Modi's programme for 100 Smart Cities has certainly got people talking about urbanism, but India is still too reliant on imported products and ideas. So 'smarter urbanisation' should involve not just inventing, but marketing products such as 'safer stoves' or 'waterless toilets' that can

give poorer people better lives in expanding towns and cities, and open up new opportunities for SMEs.

Social Change and Development (SCAD)

Is there another way forward? SCAD, a group of colleges set in a 'garden' environment in towns linked by bus routes and railway lines, works with over 500 villages and 2,500 women's groups. It has pioneered sustainable development practices such as bio-digestion and wind turbines. SCAD's visionary founder, Dr Cletus Babu, sees great potential in enabling those moving upwards to get access to better housing and education while retaining the traditional family and community values of village life.

The URBED Trust is therefore supporting SCAD's initiative to design and build 'Eco Homes' that do not use concrete and that conserve energy and water, and I was pleased to meet our local project manager, Dr Angelina Ajisha, who teaches civil engineering, as well as other members of the SCAD team. As in the UK, there is still far too little understanding of how to turn visions into reality. So the web site we have created for the project (www.smarterurbanisation.org) will offer a set of tools and information that can be used to educate staff and students. It should also help build links between those who want to channel the tides of rapid growth into sustainable development.

Hangzhou and Shanghai China 5/18 – Transforming megacities

A week in China as guest of the Bluetown/Greentown Group provided an exceptional opportunity to reflect on why China has been so successful in recent years and where its cities are going. Commissioned to give a presentation on Smart New Towns to a conference of 300 of the Group's 20,000 employees enabled me to review the features of leading 'Technopoles', and the impact that 'Smart' or digital technologies are having. Better still, it made it possible to see first-hand the amazing achievements of Chinese urban development, with a hundred cities of more than a million population, as well as the huge challenges they will face in the highly competitive global economy.

Planning with Chinese characteristics

My visit coincided with the concluding sessions of the Chinese Communist Party Congress, where hundreds of black suited men, and a sprinkling of more colourful looking women, listened to President Xi Jinping call for greater centralisation in order to tackle corruption and promote the wellbeing of the 'people'. Rapid growth has been made possible by public investment in large scale infrastructure and the heavy industry that supports it. At the same time, private business was liberated to trade with the West, as the internet and the container opened up a global supply chain.

Millions of rural peasants have moved into cities on a temporary basis to work in the large factories that supply the West with consumer electronics and much else. 43% of the population are said to be employed in manufacturing compared with under 20% in the West. Many of the factories are located along the Eastern seaboard, fuelling the growth of cities such as Shanghai, the old trading centre, and Hangzhou, known as the headquarters of Alibaba – the Chinese version of Amazon – as well as the great West Lake. Between them stretches a seemingly endless urban sprawl of isolated housing and small farms, and then great developments of towers as far as the eye can see.

As the superb International Planning Exhibition in Shanghai's People Park brings out, China is facing up to the new challenges. The urban area is now almost wholly developed, thanks to policies for increasing living space and replacing the old crowded 'lanes', as they are known. Shanghai metropolitan area now has a population of over 24 million making it the largest city in the world, equal in population to the whole of Scandinavia, and at densities many times that of Central London. The former marshy area in Pudong, across the vast river from the famous Bund, is now a dynamic business district. Chinese planning policies zone areas for distinct activities, and do not encourage mixed use.

Having provided the advanced infrastructure to connect cities with high speed trains that, for example bring Hangzhou within an hour of Shanghai compared with three hours by motorway; the priorities are shifting to improving the quality of life for city dwellers. Pollution blots the skyline. Endless traffic brings congestion and stress despite the many lanes of motorways. The suburbs appear mostly faceless and lacking in amenities. So targets have been set for cutting local journey times, and recently built metro systems are being extended. Yellow hire bikes litter the pavements. There is a national policy for creating 1000 planned new towns each with a distinct 'character.' Interesting experiments are being made in promoting energy efficient 'eco-towns'. But agricultural land, like the UK Greenbelts, is sacred, and so development has to be concentrated on formerly used land, which in practice means the demolition of traditional housing and its replacement by high rise blocks of apartments.

Housing development

What fuels such rapid growth, and makes it possible for Chinese companies to take over whole markets, is the exceptional relationship between the state and private business. The state owns all the land and the main utilities. Local authorities have no source of income other than selling off 70 year leases to developers. Agricultural workers have to be rehoused, and can enter into collective agreements. As in the UK, locations with good access, for example through proximity to new government funded metro lines, will fetch the highest prices.

Housing design seems to have gone through fashions. Of course in China as a whole urban areas are at many different stages, but as in the West, there seems to be a shift back from suburbanisation to re-urbanisation, as the young and best-educated favour the amenities only found in cities. But rapid growth has produced standardisation, and a mass society used to order. China is therefore committed to looking at what works best elsewhere, hence our conference. As we were told by the company's President at the end of our conference, the policy is one of 'Learning and Practice'. China is keen to recognise mistakes and change direction where needed, and there is a welcome spirit of optimism and pride.

Examples of innovation we saw were the new town where we stayed – Peach Blossom Valley – where a whole neighbourhood of houses has been built along traditional Chinese courtyard lines. The single storey housing units take up 100sq. metres and a similar area is given over to the delightful gardens, which encourage a contemplative spirit. Security is stressed. At the heart of the town are several streets of shops, and further away, we were shown round an innovative new primary school where Montessori classes are taught which allow children to learn at their own pace. This curvaceous two storey building adjoins housing for the elderly with the aim of integrating the two worlds. The whole complex is traffic free with electric buses that can readily be summoned.

Beautiful landscaping were also features of an agricultural research centre and a small village designed to attract tourists. The idea one suspects is to convince the authorities by the quality of the design to allow the development of housing on agricultural land. This would make the project commercially viable, as otherwise it is hard to see how the enterprises can ever cover their costs other than as a demonstration of the company's commitment to creating better places. It seems that the system works because the largest companies have good access to finance, and also no doubt political connections. BlueTown/Greentown Group has sent a number of parties to study good practice in the UK and are now proposing to visit other parts of Europe in their quest to be ahead of the market.

New and old worlds

Walking through the main centre of Shanghai provided the chance to observe the changes that are taking place. Former warehouses in the old French Concession have been turned into lively bars and eating places. The two principal streets leading to the river have become the smartest shopping streets. We enjoyed a Chinese meal with former URBED intern Jie Lu in an atmospheric restaurant carved out of the third floor of a modern shopping mall. As we walked afterwards, we were struck by the exciting lighting effects, but also by large areas that were clearly destined to be the next big redevelopment scheme. The Bund itself, with its magnificent bank buildings, is now the major tourist attraction, with a raised embankment along the river looking over fleets of river boats. Nearby signs to the 'Old City' bring one into a replica of an old neighbourhood, with lots of shops but also a splendid ancient walled park with masses of ornamental buildings overlooking water features.

Yet close by these managed attractions lie large areas of 'lanes', where families are still crowded alongside the small businesses that they run. To me the juxtaposition of old and new was the most interesting part of the city, as the modern offices could be anywhere. Yet

the boarded-up windows of many buildings suggested they were doomed, and the idea of adaptive reuse' has not yet taken hold as it has in most Western cities. The contrast between old and new could also be seen in manning levels. While factories achieve the highest levels of productivity with modern machinery and compliant labour, the service sector looks very over-manned. Large numbers of people doing any task are perhaps the way China keeps its massive population employed.

Order has also been achieved by people taking out loans to buy leases on flats or to help their children get a better education. The one child policy has created a demographic time bomb. Without siblings or many relations, there is strong pressure to work hard and to consume, but people retire relatively young. There is a reverence for authority from Confucius onwards. This perhaps makes it harder to see the opportunities for conserving and improving ordinary places before they are all lost. Yet as basic housing markets get saturated, it is probably easier for entrepreneurial Chinese businesses to transfer ideas they have picked up on foreign visits, and make a go of them. If they do not change the product mix to favour more streets and neighbourhoods, and cities become over-dependant on 'immigrants' from the countryside, the situation could become as explosive as in many Western cities.

Changing direction

In mulling over what I learned from my brief visit and enquiries but also wide reading (including an excellent new book on China's Urban Revolution by Austin Williams), I feared for the impacts of a downturn, especially given Trump's stated policy of cutting the US trade deficit with China. arge areas of lookalike tower blocks could experience a fall in demand when better alteranives a built,, and neighbourhoods are restructured as happened in the UK. It is also likely that if companies stop hiring, there will be thousands of dissatisfied young people who have played by the rules, and feel cheated unless other career optkons are opened up In my presentation, I suggested that China could learn a lot from the rise, fall, and subsequent resurgence of central Manchester (and indeed other post-industrial cities). However, this will require many more two way discussions, rather than relying on presentations alone.

If both our countries face similar challenges in adapting our cities and rural areas to new economic roles whilst living within environmental constraints, there is surely scope for collaboration at many levels. It may actually be easier to apply the kinds of principles URBED has been advocating for years, especially as Ebenezer Howard's Cities for Tomorrow is still treated with a reverence it long ago lost in the UK. The challenge in both countries is not just to draw up attractive masterplans but to set up the mechanisms for financing and implementing new settlements that will stand the test of time. This above all means devising better ways of resourcing local government. Given the many Chinese academics in leading British universities such as Cambridge and UCL, a good place to start could be to rethink the relationships between town and country in the light of demographic changes.

Havana Cuba 3/13 – Regenerating historic areas

In looking round the Old Town in Havana, an area of 14 hectares where some 70,000 live in very crowded conditions, I was impressed by how Cuba is tapping tourism to help fund urban regeneration. The key has been joint ventures with foreign hotel groups. The strategy since 1993 has been to restore the main squares and streets running between them. Half the funds are used for social programmes. Cuba's priorities have been education and health, and latterly producing more food and energy.

The history of Cuba over the last half century, and its World Heritage sites, shows not only what can be achieved with very limited resources, but also the limitations of relying on tourism as the main engine for economic growth. To understand the challenges of urban renewal in a historic area we need to appreciate a little of Cuba's colonial history, and also its extraordinary situation as an isolated experiment in putting communism into practice.

The Old Town is controlled by the Office of the Historian, (who I met briefly) which has enabled high standards to be achieved. But most of buildings still remain unimproved, and many are derelict, especially in Central Havana. In the last three years Cubans have been allowed to open up shops and small restaurants, to add to the mass of musicians making a living from tourists.

However inequalities are growing, with rising numbers of cars (not just American hangovers, and hustlers). While there are no shanty towns, the disparities between the different quarters and population groups could lead to considerable conflicts as markets open up. Huge investments are required to get the railways running properly and upgrade the water system, reminding one of London!

A Caribbean colonial island

For many centuries part of the Spanish Empire, and strategically located near Florida and the Gulf of Mexico, Cuba was largely developed for its crops of sugar and tobacco. There are some extraordinary planned colonial towns such as Trinidad and Cienfuegos, where fine mansions contrast strikingly with the largely single storey homes of the mass of residents. The shacks of the former slaves have disappeared, but the ruins of old sugar mills can still be glimpsed. Cuba's history of slavery has left it with a multi-cultural population with an exceptionally rich musical heritage.

By the end of the 19th century, as in many countries, the rich have moved into new suburbs, leaving the older areas to become multi-tenanted slums. After gaining independence from Spain, Cuba entered into a strange relationship with the USA, and American companies ended up owning the main industries and utilities. Cuba's proximity and fine climate made it a natural destination for tourists. Havana grew into a fine modern city with wide boulevards and impressive buildings in areas such as Miramar and the Rampa. Wealthy Cuban families built magnificent houses

But its position as one of the wealthiest Latin American countries in the 1950s was associated with some of the greatest inequalities. The poor moved from the country into dense areas such as Havana's Old Town, which few tourists would have visited at the time. Restoration of monuments and buildings such as palaces go back to 1929. However the

breakthrough in designating historic areas came when the Office of the Historian was established in 1938 to protect what was specialabout the part of Havana that was developed in colonial times

The impact of the 1959 revolution

An over-whelming desire for freedom and for the downfall of Batista, who had become a dictator, culminated in a successful revolution led by Fidel Castro, with support from both the countryside and the towns. American outrage at the nationalisation of key industries and larger properties led to the extraordinary long blockade, which is widely known, as well as all kinds of 'dirty tricks' to depose Castro. After attempts at economic diversification, for example into medical products, Cuba was forced into a deal with Russia, which for a time went well, as a high price was secured for sugar exports. But the collapse of the USSR led to the Special Period, with acute shortages of both food and oil.

Investment since then in social services such as education and health has resulted in a long lived and 100% literate population, which has almost doubled to around 11 million, with 2.1 million in the capital city of Havana. But many of the former middle class emigrated to the USA through the 1960s. Florida is only 90 miles away at the closest points, and this large expatriate group has exerted exceptional influence on successive US governments, with changing policies between the two countries over travel and trade.

Groups have been allowed in from the USA to visit cultural attractions, while strong links have been developed with Canada. Many tourists also come from other Latin American countries and Western Europe, resulting in tourism being the main source of foreign currency, and a major employer. Many of those trained in subjects such as medicine and engineering, are attracted into tourism because it offers much higher incomes in convertible currencies.

The consequences for conservation

Initial attempts to document and interpret the Island's unique history led on to ingenious initiatives to turn Cuba's heritage into hard cash. Havana's Historian secured a budget for improvements in 1981 from the Cuban government. In 1982 UNESCO designated the first of a series of World Heritage sites which made it much easier to justify putting scarce public resources into conservation. Significantly the goals are not -only conserving the physical fabric, but also the social qualities that make the area so special. The historic area covers some 14 hectares between the harbour and just beyond the old city walls, including part of the waterside promenade known as the Malecon. The core is pedestrianised, and traffic is largely confined to bike taxis. Car parks have been provided on the edges, and there are large numbers of taxis, many of them old American cars from the 40s and 50s, which add to City's special atmosphere.

Repaving the four main squares, and streets between them, along with landscaping small pocket parks where buildings had been demolished, helped create the confidence needed to attract foreign investment. With an initial budget of \$1 million, joint ventures with international hotel chains were set up for some 18 hotels. The first was the Hotel Valencia, one of many private mansions built around courtyards. These are joint ventures between the state agency Habaguanex and foreign investors, often Spanish hotel chains, on a 51:49 basis, often with joint managers

In the Historic Centre there are just two joint ventures linked to the Historian's Office: an office building –the first built in Havana in 1907-1909 and totally rehabilitated in 1995-1996 with a 51% to 49% participation and the Saratoga hotel with a 50% to 50% participation, the first with a Spanish Bank and the second with a British group.

45% of the revenues of all commercial activity funds under the control of the Historian go into new investments to provide physical renovation and 35% into social programmes, which are seen as equally important. The other 20% is used for new projects such, as for example a contribution to the rehabilitation of the national art schools. Major work is underway to improve the infrastructure, such as new water pipes. The comprehensive plan of rehabilitation of the historic centre is reviewed every five years after a survey to establish occupation and the state of the buildings. About the 30% had been accomplished in the period between 1993 and 2004, and work is underway on a number of sites where no more than shells remain.

Some 70,000 people live in the 14 hectares of the Old Town, similar to the situation half a century ago, which means high levels of overcrowding. The policy is to avoid squeezing anyone out, while securing a greater social balance, which can be achieved because the Office of the Historian or the municipality owns almost all the properties. One benefit was to use the museums as classrooms while schools were being refurbished, and there is a huge range of museums including unusual ones dealing with playing cards and, of course, rum, which have taken over some of the finest buildings.

An important part of the investment has gone into improving living conditions, in the five main squares, which are gradually being upgraded. But a building of 15 apartments houses formerly housed 46 families when the building was still a tenement house, and there is still relatively little new housing being built to accommodate the growing population. Rents are related to 10% of family incomes, which is quite insufficient to pay for the renovation that is needed. There are other potential sites for hotels, so relying just on tourism to support regeneration may not be feasible in the longer-term. But the local industries are still weak and small-scale. The main cigar factory was closed at the time of our visit for refurbishment. A fine mansion had just been restored and reopened as galleries for artist-craftsmen and creative businesses are playing a major role in the Old Town's renaissance.

The conservation policy has also had economic aims. It is noticeable how many people are involved in keeping the streets clean, and staffing the large numbers of museums which have taken over some of the finest buildings. More than 10,000 jobs have been created through the process, and the Old Town has become Havana's greatest attraction. The fine streets of Obispo and Mercaderes now include not only lots of bars featuring different styles of Cuban music, but also increasing numbers of private restaurants and shops, now that occupiers are permitted to establish small enterprises. There is also a huge amount of street activity. A lady with a strong voice who sells peanuts, was given a grant so long as she continued to wear her fine costume! The Office of the Historian employs 300 people itself, and effectively manages the neighbourhood 'like the Vatican'. Some employment is provided through construction work, and there is a Trade School, which leads on to apprenticeships.

Conclusion

Within the strong street grid there is an extraordinary variety of building sizes and styles, with tall 1930's modernist or art deco buildings next to two or three story classical mansions or commercial buildings. Open windows with grills or balconies, and often large courtyards creates a rich melange of living streets, making walking a pleasure. High densities in the older parts support high levels of social interaction, and the rich social capital compensates perhaps for the poor state of many of the buildings. Cuba feels much safer than many comparable countries.

However the contrasts are still very visible, not just between town and country, but also between different parts of town. It is probably the people living in rural areas who have benefited most from the Revolution, but there are not the jobs to use the skills of all who now get educated. The temptations of moving abroad, particularly to the US other parts of Latin

America or Canada are strong. Incomes that depend heavily on tips encourage hustling, which can conflict with the calm that visitors may seek.

Cuba's historic quarters and balmy climate attract plenty of retired visitors, while the music scene appeals to a broader age ranges. The regeneration not just of Havana's Old Town but also Cienfuegos, Trinidad and other historic cities that now form a national network could therefore offer models for colonial cities in other parts of the world, and shows what can be achieved without letting economic forces get out of hand. But the achievements could also be fragile, depending very much on the policies of future US governments who so far have preferred to support dictators who give free rein to big business and international capital to those who try to control their own destinies.

So what are the features of the Cuban model of heritage based regeneration that others could learn from?

- 1. A strategy based on upgrading the public realm in the main squares and the streets that link them
- 2. A policy based on retaining the historic qualities and memories that make the old areas distinctive, and that conserve the guarters as living places, not museum
- 3. A strategy of public ownership of all the properties, under the control of a team with skills in historic conservation and economic development, and led by the position of historian (and who has been described as 'like the Pope')
- 4. Partnerships with private investors but on terms that maintain control and with proceeds being reinvested in the wider area
- 5. The involvement of creative people at every level, including excellent interpretation, signing, landscaping and public art.

New York 8/13 – Creative destruction or the creative age?

As the centre of the world's financial system, New York is in a pivotal position to act as a model for how many of us are going to work and live in the future. The economist Joseph Schumpeter argued that capitalism progresses through 'waves of creative destruction'. Now that IT may be reaching maturity the hunt is on for the next 'big thing'. Professor Richard Florida, author of the influential 'Rise of the Creative Class' thinks what he calls the 'Creative Age' offers the way forward. In an article on Ever Resilient New York he reports that by looking at New York's top 50 occupations, 'the large majority were in the creative sectors of arts, culture, design and entertainment'. Indeed there are neighbourhoods in Lower Manhatten and adjacent parts of Brooklyn and New Jersey where they account for more than 80% of jobs. The President of New York University goes further in saying that the future is not FIRE (Finance, Insurance and Real Estate), but ICE (Intellectual, Cultural and Education).

So how has New York managed to reinvent itself after the shocks of both the collapse of some major banks, the 9:11 destruction, and Hurricane Sandy? Much of the credit is given to Mayor Bloomberg, who used his personal wealth to rise above local interests, and as a result changed the face of the city. A New York Times article on his legacy, said 'Recognising that manufacturing was not coming back, Bloomberg poured money into rejuvenating the decrepit waterfront. He restored and expanded parks and other public spaces – not just landmarks like Central Park and upscale novelties like the High Line... He rezoned not just plots but neighbourhoods – a quarter of the city! – promoting growth in transit-rich areas, sustaining local character elsewhere, occasionally putting too much faith in developers but generally imposing order on chaos'. Incidentally he raised property taxes early on, to keep the city afloat, as once before New York had faced bankruptcy.

The City has played a proactive role, because it has access to capital funds that exceed its revenue budget. The resurgence of the City is clear, not just in the gentrified parts of the Lower Eastside or Williamsburg in Brooklyn, but in how the streets and open spaces, such as Bryant Park feel safe and pleasant. But even a powerful Mayor like Bloomberg failed to get congestion charging approved at State level, and had to rely on raising parking charges instead. Unlike my former visit over 30 years ago, the subways are now graffiti free. The ethnic background of the residents has also changed, as Hispanics and Asians have taken over from Afro-Americans in the basic service jobs, such as in bars and taxis. Those squeezed out of Manhattan by escalating property prices may be making some adjoining areas more vibrant, but they also may be adding to conflicts in others.

Unfortunately the creative 'oases' that have emerged tend to serve the few rather than the majority. One English émigré responded to my probing by pointing out that Apple had managed to patent the corners on its Ipods, and somewhat inevitably it tends to be the lawyers who gain most. On a chance trip out on train up the Hudson River to the little town of Beacon Falls we discovered some high quality bars and shops. To our surprise the major employer, a large packaging plant, had been superbly turned into the largest art or sculpture gallery in the world, providing space for the main sponsor's collection of giant steel works by Richard Serra. What was once a working class town was becoming an artistic centre (where incidentally Pete Seeger lived), not unlike English towns such as Stroud and Hebden Bridge.

New York City, even more than the rest of the USA, has regained most of the jobs lost in the recession, but the new jobs are relatively low paid being part-time or in the health and social services, and tourism sectors. House prices are rising, though not as fast as in other metropolitan areas, and the latest immigrants are packed ever more tightly into properties that are rented out in the less attractive residential areas. Chinatown now occupies much of

the space formerly associated with Little Italy, while Ukrainians have apparently vanished from the East Village. They had possibly been replaced by Asian students at New York University (NYU), which dominates the heart of Greenwich Village.

Undoubtedly great cities like New York foster 'creative milieus', where people can meet up with others just like themselves, aided by the new 'social media'. In turn, as young people start to favour urban living, and reject the suburban car-based lifestyles of their parents, new life is being injected into the older urban areas that are well-connected. An injection of urban quality, such as the restoration of Bryant Park or the opening up of a linear park called the Highline along the old freight line that served the meat packing district, can transform an area's image. It also gives confidence to both occupiers and property developers, who can benefit from the upswing in the property market once space is released. Projects such as the development of the Hudson Park railway lands should therefore reinforce New York's intrinsic advantages. But they are unlikely to do much good for the people or places that have lost out. A Business Improvement District in an area where no one has any money to spend cannot achieve much. Furthermore, the price of a career in New York is taking on more debt than many can expect to pay off.

It is good that research is underway at NYU's Schack Institute and elsewhere to establish how the various networks they are mapping can lead to new products and employment. But it could be a temporary phenomenon, as those with the most talent move to places that are not quite so hectic or costly. New York is looked on with suspicion by the great majority of US citizens who come from small towns, and inhabit the middle of the country. It may be that it is good cities where people can live better lives rather than great places that attract tourists and students that will hold the keys to the future.

Pittsburgh 3/16 – Renaissance through mobilising local assets

Pittisburgh is one of a series of cities in the so-called 'Rustbelt' that suffered from the loss of traditional industrial jobs. Its transformation is therefore all the more important, and has been highlighted by urban experts such as Bruce Katz. The renaissance of Pittsburgh, once known as 'smoky Pittsburgh', to the position of being judged 'most liveable city' by the Economist owes a lot to the work of the Pittsburgh History and Landmarks Foundation. Established by Arthur Ziegler in 1964, when I visited in 2016 the Foundation was worth over \$80 million and employed 27 staff. It works by taking on abandoned properties and restoring them, as well as by loaning funds, and providing expertise to others. It is constituted as a non-profit organization, with development and financing subsidiaries that can recycle their profits through the Foundation. Increasingly it is acting as a neighbourhood renewal agency, as in the suburb of Wilkinsburg, some of which had been previously taken over by absentee landlords, as white working class residents moved out or died. Classes on restoration skills attract residents and people from further away, who are working together to bring the neighbourhood back to life.

How the Foundation Helps

The keys to the Foundation's success has been packaging tax credits for historic preservation, and working closely with the City Council, who can take over properties when the owner fails to pay the taxes that are due on them. Where once the City went for grand urban renewal projects, like the Arena area that is due to be redeveloped for housing and mixed uses, it now supports bottom-up regeneration combining social and physical regeneration. The US financial system has three ingredients that favour this kind of project. First it is the owner, not the occupier, who pays property taxes, and these go to the City, County and Schools. Second, incentives are provided through easements that permit the Foundation to control exterior design. Third, wealthy tax payers can write off expenditures on restoration of landmarks and affordable housing through tax credits which the Foundation is able to package together with other funds, thus providing an effective source of grants.

Pittsburgh's success

Though the ready availability of cheaper properties on the edge has encouraged the flight of both people and capital from American city centres, there is a counteracting force at work in Pittsburgh to adapt old areas to new uses. Pittburgh's renaissance has been contrasted in the American press with Detroit's bankruptcy, another 'rustbelt' city with a number of significant differences. First half the jobs in Pittsburgh are within 10 miles of the city centre compared with a tenth in Detroit. Second as the jobs have shifted, those left behind are predominantly black (81% in Detroit), and the population there has fallen so far it can no longer support the services needed to maintain the social and physical infrastructure.

Pittsburgh too has its 'disadvantage areas', but the centre looks and feels clean and safe, with pleasant green open spaces. As a result people are coming back to live in the Downtown area (10,000 compared with 3,000 a few years ago) and in these help to support the growth of restaurants and smarter shops. Housing costs are a fifth of those in New York and far below Washington, thanks to the ready availability of restored houses in the inner areas. In turn new offices such as Google have been attracted by the prospects of recruiting and holding on to good staff with technical capabilities.

The economic base of the city has changed too. Like other US cities, the predominant activity of central Pittsburgh is also 'Eds and Meds', with some four universities and fine medical facilities. Chinese students are attracted to the technical training on offer. The

striking headquarters of US Steel is now the home of the University of Pittsburgh Medical Center. Tourism is growing in importance, encouraged by projects such as the conversion of the old railway terminus into Station Square, with its hotel, offices, and fine dining rooms, which was the Foundation's first project. There is even the start of a shift to public transport, and the short tram line has been extended to cross the two rivers that surround the Downtown area.

Ongoing challenges

However under the surface some cracks can be detected. Restoration typically costs much more than the property can be sold for, and needs to be cross-subsidised. Yet with low property values, this is not easy to achieve in the short-term. The Foundation was fortunate in developing and later selling off Station Square when it did, which has provided it with the capital to make profitable loans and undertaken development projects. Though there are lots of hybrid buses, the transit system is confusing. There is only one train a day to the State capital of Philadelphia, some 350 miles away which takes over seven hours. Hence traffic dominates the main roads, some of which have degenerated into 'edge city strips' where walking feels out of place. Tax credits, which have nationally funded some 2.6 million affordable rental homes across the country, are under threat from a Congressional overhaul of the tax code that seeks to eliminate tax breaks.

Also even though the population is no longer declining, it is half what it once was, and the City Council could face problems in meeting future pension obligations. The eminent Professor Richard Florida, who is credited with discovering the 'creative class', attacked Pittsburgh when he taught at the University for not being an open enough society that welcomed minorities. David Lewis, the British urban designer who founded Urban Design Associates as a spin-off from his work at the University, comments in an introduction to a guide to the city's architecture and urban spaces that 'Pittsburgh is a city waiting to be discovered and explored. Is it a 'great' city? No, not yet. I would say it has the making of a great city... A great city is, in fact, the art work of its people... Old buildings are much more than just obsolete structures in the physical sense. They are the custodians of our cultural continuity as a city and as a community.'

Conclusions

In a short visit, made memorable by staying at the superb Mansions on Fifth, a boutique hotel which the Foundation helped fund, and meeting so many committed urbanists, I was struck by the similarities with British post-industrial cities like Sheffield and Manchester. Pittsburgh has wisely seen the need to go beyond grand redevelopment projects to making the most its physical heritage, and creating clean, green and safe streets.,

Pittsburgh provides a model for how industrial cities can secure a renaissance through making the most of their local assets. The key is a city based development trust that combines skills in restoration and landscaping with the ability to negotiate favourable property deals and fund projects that banks would not consider. This is backed up by a property tax system that rewards enterprise not speculation, and that penalises those who sit on empty property and allow it to decay.

Vancouver/Portland/Seattle/San Francisco/Palo Alto 11/19

1. Growing good cities

The latest in my *Postcards From the Future*, which now number over 40, deal with the links between technological change, urban growth, and human wellbeing. My journey from Vancouver in British Columbia on the West of Canada to Palo Alto South of San Francisco in California took in some of the most prosperous places in the world. My experience raises the question of how so many people can live on the streets in cities in the richest part of the world, and why the revolution in information technology has not resolved the problem of traffic jams and urban pollution. In a period when forest fires in California are highlighting the widespread impacts of global warming, I wanted to explore whether our cities can change direction before it is too late. In a book with Sir Peter Hall we had used a tour round European cities to structure our analysis. I hoped to do something similar in a trip of over a thousand miles that took three weeks.

I planned the trip around a return to Palo Alto, the birthplace of digital or information technology, which some class as the 'fourth industrial revolution'. An invitation to a 50th anniversary class reunion at Stanford Business School provided an excellent justification for revisiting cities on the West Coast of North America over three weeks. As well as fascinating discussions with some leading experts I was able to study recent books on innovation and the impact of the high-tech revolution on housing and congestion, and in particular on Portland and San Francisco. My partner Esther and I were also able to watch American television and marvel at the contrasting explanations given on Fox News and CNN, and read insightful stories in papers like the Wall Street Journal and New York Times. Hopefully my impressions will stimulate discussion on how to secure 'smarter urbanisation', that is growth that does not cost the earth.

My particular interest was in lessons that could be drawn not just for London and the South East, but also for rapidly growing cities in Asia and elsewhere. In a world where half now live in cities, and 40% of a global population of 7.7 billion are under 24, what can be learnt from the American experiment? A big question, given the challenges of global warming, population movement, and economic disparities, is whether and how cities can shift course, and use new ideas and technologies to support more sustainable and intelligent ways of life.

Our itinerary

With Esther Caplin, we started by flying into Vancouver in British Columbia, Canada, and then took the ferry for a day at Victoria on Vancouver Island, before taking another ferry down to Seattle. A four hour journey on Amtrak due South took us to Portland, a world model for 'smart growth'. After a couple of days exploring the city on its fine rapid transit systems, we took an internal two hour flight to San Francisco. Staying with a friend from my Stanford days near Golden Gate Park, we spent a wonderful week using buses and trams as well as a lot of walking around, before being driven down to Palo Alto, where we stayed a short walk from Stanford University's beautiful campus. We finished by taking the Caltrain a couple of stops and changing on to BART to get to San Francisco airport and thence to London after three great weeks looking and learning from the current innovation centre of the world.

¹ Peter Hall with Nicholas Falk, Good Cities Better Lives: how Europe discovered the lost art of urbanism, Routledge 2014

During this time, I was thinking about a book on how cities can change direction so that they become more sustainable, affordable, healthier and happier. In this series of 'postcards from the future' I have tried to organise my thoughts around the themes of how cities grow, how transport affects investment and activity, how cities can respond to housing demand, why innovation happens in some places and not others, and finally what can be done to create a climate of enterprise and collaboration in other rapidly growing towns and cities. In short, the West Coast of North America is both an inspiration and warning for other places on how good ideas can get out of hand when the pursuit of money becomes the dominant value, and when planning loses its powers to moderate human behaviour.

Rapid growth and population displacement

The ascendance of the West Coast as one of the best places to live and work in the world is quite recent². Cut off by deserts and the Rocky Mountains on the East side, and by the Pacific Ocean on the West, it took missions from Mexico to colonise the coastal strip, leaving Spanish names behind, but few residents. The native Americans were either forced North or died from disease. Their distinctive and highly social way of life is celebrated in the splendid ethnographical museum of British Columbia in Vancouver. Further South in Mexico and Guatemala, the Mayans built great cities and civilisations, as we saw in a superb exhibition in the museum in Victoria on Vancouver Island. However, they were forced away, probably by climate change and civil war over a thousand years ago, a salutary lesson, and their cities were covered over by jungles until recent archaeological excavations revealed them.

The Mexican settlers who built early market towns like Sonoma, now the capital of the Californian wine industry, and Monterey, lost their titles to the land when the emerging USA took over. The US federal government sought to create new states in the West that were not dependent on slavery, and abolished church land. The Central Pacific railroad that broke through the mountains was paid for by the US government and incentivised by land grants (every alternative square mile). This made four San Francisco traders very rich. Chinese workers were brought over to do the hard and skilled work. Subsequently two gold rushes attracted many more pioneers and turned San Francisco and Seattle into boom towns. Land was given on favourable terms to those prepared to build houses or homesteads. The arrangement encouraged a distinct spirit of individualism rather than the collectivism of European towns and cities from which pioneers had come.

California's early wealth was largely created through agriculture. This was made possible by the many who fled the dust-storms of Oklahoma, immortalised in Steinbeck's *The Grapes of Wrath*, which came out just before the Second World War. Gold and silver mining were also major attractions. The dry flatlands of the Central Valley and Southern California were irrigated and turned into orange groves and other crops by piping water down from the Northern hills, a story partially told in the film *Chinatown* (with Jack Nicholson and Walter Huston.) Government funded water projects were crucial to turning virtual deserts into farmland and enabling individuals to prosper.

The term 'robber barons' was sometimes used to describe those who capitalised on the great financial 'surges'. One of the San Francisco four was Leland Stanford, whose money came largely from owning the sub-contracting firms who built the railroads. His land provided Stanford University with its principal asset, and enabled pioneers in electronics, such as Hewlett and Packard, to get going, on electronic gear vital to winning the Second World War.

Somewhat ironically, Mexicans or 'Latinos' have moved in again to work not just in the fields but as service workers. Of those classified as poor in California, 70% are white of which

² I am indebted to classmate Richard Gregory, a native Californian, for his valuable comments and corrections of my short , and inevitably naïve, history.

Hispanics make up the majority or 40%). Recent immigrants have been supplemented by large numbers from Asia, who range from workers at, for example, San Francisco airport, to the wealthy investors from Hong Kong in prime real estate ranging from Vancouver to Palo Alto and Irvine. Half the students at Stanford Business School come from abroad. The Information Technology hub at Palo Alto is like the magnet of a dynamo in drawing people or energy to it and multiplying their efforts. As in the UK, there has been strong resistance to building new housing from the wealthy people who live in the hills or along the coast, and the environmental movement is well resourced. Hence the inevitable result has been escalating housing costs and congestion as people spend hours driving to and from work.

The changes were most visible in driving through East Palo Alto, which half a century ago had been known as a 'black ghetto', but African Americans have largely moved away. Streets off University Avenue, where I and fellow students had rented a house, are now for the very rich. As I was to read later in a powerful study of displacement by San Francisco author Alex Schafran, escalating rentals and then foreclosures due to the overselling of mortgages had led to another great population movement.³ But this time people have moved been across the San Francisco Bay and out beyond former industrial towns such as Oakland to Stockton and the San Joaquin Valley, far away from the high paid jobs of Silicon Valley. Like the Indians or the Mexicans before them, the African Americans have largely been displaced. At the same time commuting has rapidly grown for those who can afford it, turning old towns into suburbs.

Public investment

Significantly while California invested relatively little in public transport, between 1982 and 2,000 the prison population increased by nearly 500%, two thirds of whom were African Americans and Latinos, as Alex Schafran stresses in his book on displacement, which he calls the 'road to segregation'. Expenditure expanded from 2% to 8% of the State budget. At the same time Proposition 13, which was passed in a referendum, limited tax increases. Existing property owners refused to pay for the local infrastructure needed by a growing population. Environmentalism trumped the common purpose of the advocates of 'smart growth' and social justice. Social divides widened.

Yet the planning process is in many ways exemplary in the larger cities such as San Francisco. Communities are engaged in how their cities should grow. Consortia for planning were created and public private partnerships formed for major projects. Bonds were issued using Tax Increment Finance in which a rise in the city's tax revenue is used to service and repay loans that have been approved through a ballot. A vital distinction was drawn between Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs) in the Plan Bay Area, as the process for the wider sub-region was called, which began in 2011. The problem is that implementation can be powerless without ownership of the land.

The growth of California into the richest state in the world's richest country is a tribute to individual enterprise backed by government expenditure. In the process of promoting economic growth, the West Coast is attracting immigrants from all over the world. While this has brought economic benefits, including hundreds of thousands of new jobs, it is also creating serious social and environmental conflicts. Poorer people end up being displaced far away from opportunities, and end up driving far further for work. The fourth industrial revolution is having as profound an impact as the ones that preceded it, and planning seems powerless to direct investment where it is most needed.

³ Alex Schafran, The Road to Segregation: Northern California and the Failure of Politics, University of California, 2018

James Tracy, Dispatches against Displacement: field notes from San Francisco's housing wars, AK Press, 2014

2. Fostering innovation and new work

This is the second set of impressions from a three week return visit to California and the North American West Coast in which my partner Esther and I travelled from Vancouver in British Columbia to Palo Alto in Northern California, a distance of a thousand miles. This one deals with how the USA came to lead the world in information technology, while lagging in personal mobility.

Why has the 'fourth industrial revolution' based on Information Technology been so concentrated along the American West Coast? After all it could have been in Europe, in cities such as Manchester, where the first working computer was built, or in Nice, where the warm weather rivals that of the West Coast. Much of the answer is set out in a brilliant book The Innovators by Walter Isaacson, (which I read on my Kindle as we toured the West Coast.)⁴ Isaacson, who once chaired CNN and was former Managing Editor of Time magazine, has unpacked the stories of each of the main innovations and their inventors. from Charles Babbage and Ada Lovelace to present day giants like Bill Gates and Paul Allen, who turned Seattle into a high-tech hub. (6) An intriguing timeline in Isaacson's book shows how they were linked before production shifted to the East. A ride on Seattle's trams shows how talent and capital are being attracted back from the Far East. Isaacson explains that not only were the great inventions typically the product of small teams rather than individuals, but also the climate or culture of an area shapes what happens with inventions. The West Coast temperament is much better attuned to experimentation and recovering from failures and setbacks than the conservative and cold East Coast. The pioneering tradition described earlier partly explains the success of the post-war pioneers in information technology such as Hewlett and Packard, or the men who built up Fairchild, or more recently Larry Page and Sergey Brin, who set up Google. They were all graduates of Stanford University, which was built on land donated to commemorate Leland Stanford's son, and which has done so much to spawn the fourth industrial revolution. The tech entrepreneurs wanted to create work that allowed them to live on the relaxed West Coast and make an impact on the world. In turn this created a magnet for innovators like Mark Zuckerberg, the Facebook founder, whose motto was 'Move fast and break things'.

Origins of Silicon Valley

The term Silicon Valley was coined around fifty years ago. The invention of the minute silicon chip that replaced the slow and bulky electrical valve, enabled giant companies like Xerox and IBM to service the demands of the American government, and enabled the USA to send the first man to the moon. One wave tends to follow another. Even with the power of IT, human interaction is also vital. Harvard economist Professor Michael Porter has proved, clusters matter. Smart people tend to live near their peers or mentors, and trade with each other. The man who turned Stanford from a rich man's finishing school into what is now widely regarded as the world's leading technology university was Fred Terman. He started as a professor of electrical engineering before returning after the Second World War as Dean of Engineering, when the university's main asset was its landscape. He recruited innovators such as William Shockley. Shockley claimed to have invented the transistor, an electronic microswitch, on his own when he was at Bell Labs. Shockley was so unpopular that his colleagues left and turned Fairchild into the first volume 'chip' manufacturer, an unplanned but crucial step in the path of innovation.

Terman's prevailing ethos for Stanford, unlike that of Harvard and MIT on the East Coast, was to encourage academic staff to work with students to get inventions into production. The role of 'mentors' has remained important, as I was assured by one of the most successful business founders and venture capitalists from my class of 1969. Clearly the availability of

⁴ Walter Isaacson, The Innovators, Simon and Schuster, 2014

people with advanced technical skills prepared to offer excellent advice and encouragement freely in the early days before businesses can pay for consultants gave the West Coast a real edge. So too did the practice of beaming university lectures directly to local employees of hi-tech firms so that courses could be audited or taken as degrees. Venture capital and law firms then provided the funding and expertise to take good technical ideas to commercial fruition. A complex business services sector grew up on their back (unlike the situation in potential European rivals).

Assuming the role of university Provost, when the only resource Terman could mobilise at the time was land, he made space available for three important ventures. First came the Stanford Shopping Centre to generate income and meet student needs. Second came Stanford Research Institute (SRI) to capitalise on inventions, and link research and development. But most important of all was the Stanford Industrial Park, which has led to a crop of science parks around the world, none of which have achieved the same success. Today 80% of the university's sponsored research budget of \$1.6 billion in 2019 comes from the government in 6,000 different projects, with medicine accounting for two-thirds. Successful graduates give money back to the university to endow fine buildings. But 50 years ago it was electronics where the key breakthroughs were made.

Waves of innovation

The first wave of innovation took place in the ample garages of Palo Alto and neighbouring Menlo Park. This is where pioneers like Hewlett and Packard, the real 'technology innovators, but later Steve Jobs and his original partner Steve Wozniak first made their names. A second wave of business transformers such as IBM and Xerox changed the way business worked. They first moved into purpose-built offices and production space in the science parks along the main roads. These providing space where companies could impress their customers, typically in the early days the US military and then the space programme. The name Silicon Valley no doubt gave government customers the confidence they were in the right place for buying yet unproven technologies. I was told at the time the international companies wanted to locate where it was easy to attract (or lay off) good staff, and where 'their wives could audit courses such as art history'. This changed once women moved out of the kitchen to take on leading roles! IBM at one time employed 13,000 workers in its campus at San Jose, before shifting production to China after some 50 years in the early 2000s, though their research centre has remained.

The third wave, who might be called the 'world changers', or 'business disruptors, accommodated the major consumer oriented large companies such as IBM and Xerox, who transformed the way offices worked, and their successors such as Apple and Google who created completely new consumer products and services. They built campuses for their staff taking over cheap land on the edge of the built-up area. In the early days private developers built thousands of detached suburban houses. Today some of their redundant industrial land is being turned into higher density apartments. Google's owner Alphabet is planning its own 'Smart City' on a lakeside in Toronto. Meanwhile a whole web of companies has grown up around Microsoft in Seattle.

Most recently a *fourth wave* can be discerned in the massive towers around Salesforce Park, which had opened two months before our chance visit on the top of San Francisco's new transit hub. These are occupied by what some refer to as the 'global disruptors', who lease space from property companies. The whole area is being redeveloped after the last earthquake in 1989. There is even said to be a kind of PayPal 'mafia', with lots of interconnections, and perhaps a new set of robber barons in the tradition of Leland Stanford. Today's techies, or their salesmen at least, like to live in city centres rather than the suburbs, yet despite starting salaries of over \$100,000, can only afford to lease their apartments. They certainly could not afford to live around Stanford any longer. Many seem to be moving

even further out to cities such as Seattle, where despite the wet climate all that a hi-tech employee might want is on their doorstep. Eating out seems to be the norm.

Social consequences

The patchwork of predominantly small local authorities with populations as low as 67,000 in Palo Alto, though well-intentioned, are no match for the economic forces at work. Their size makes it difficult to collaborate across borders and address social inequalities and elitism. Nor do they seem to be able to secure integrated transport. Nowhere in the region came close to meeting the targets for housebuilding that have been set. So though the Bay Area was a leader in tackling greenhouse gases, it was a loser when it came to foreclosures, that is the repossession of houses whose owners had defaulted on mortgage payments.

The persistent and growing contrasts between the lives of the rich and the poor are most evident in the big cities but also apply to the wider state of California. The failure to apply technology to create fully integrated transport systems or truly affordable housing, reveal a basic flaw in the American capitalist system. It is what economists refer to as the 'tragedy of the commons.' Using the example of over-grazing, individuals pursuing their own interests can result in everyone ending up worse off. The financial markets overvalue tech companies, and investors in companies such as WeWork or Uber are unlikely to get their money back. Meanwhile local authorities remain under-resourced because of voters' resistance to higher taxes.

As is evident from the large numbers living on the streets or in vans, the market system that prevails in most of California offers no safety net for those unable for one reason or another to compete for living space. The vast revenues of the tech 'titans' dwarf those available to state authorities but do little to counter the housing crisis they have indirectly caused. Attempts to build tech. utopias, as Google is trying in Toronto, are resisted. The property values of newcomers such as Google and Facebook in Santa Clara County are nearly as valuable as those of Stanford University, with its much larger land holdings and over 130 years of growth. Apple has been described by FT columnist Martin Woolf as 'an investment fund attached to an innovation machine and so a black hole for aggregate demand.' The situation is therefore inherently unstable, with huge funds floating round the world in search of low risk tax havens.

Business Schools as incubators

The role of the university is still important in creating new work. Universities such as Stanford (which comes second on some global rankings) do so by attracting the best qualified faculty and students from all over the world. Undoubtedly the beautiful climate and cultured surroundings help. In returning to the Graduate School of Business we were given excellent presentations on leadership and diversity. But I recalled that it was the teaching methods of debating real-life case studies that had originally given American business schools their lead. Today more attention is being placed on learning communication skills and on self-development or leadership. There is much more emphasis on creating your own business or social enterprise. The idea of training students to tackle local environmental or social problems seems to have lapsed.

Fifty years ago Stanford University was rocked by student protests about contracts from the US government to Stanford Research Institute (SRI) for work on counter insurgency and chemical and biological warfare, which accounted for some 10% of their turnover. I was one of a committee that came up with proposals to sell SRI to its staff, with constraints on the work it did, and a Marxist economist was recruited from Cambridge by student activists. The

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⁵ Rana Foroohar in Will Big Tech Cause the Next Big Grash, Guardian Long Read, November 8th 2019

Vietnam War and its expansion through other parts of South East Asia, the space programme, and Reagan's defence build-up in the 1980s led to private companies along the West Coast gaining a commanding lead in technologies that came to dominate the world. It seems the radical thinking that inspired the Whole Earth Catalogue and a host of innovative rock bands has petered out.

Government procurement still lies behind most of the innovations that we take for granted from the Internet to the touch screen. It was no coincidence that so many of the pioneers knew each other, like the founders of Google, because they came from the same town or went to the same university or school. But it was government money that paid for R&D. Today 90% of Stanford University's research budget is for medical research. The many business successes are commemorated in the exceptional buildings that have been donated, such as the Knight Building from the founder of the footwear company Nike, which is based in Portland. Sponsored fine art galleries and music centres along with the best ranked teaching make Stanford University a world leader on many scores. Great job prospects, especially for those doing engineering, give it a commanding advantage over the European equivalents such as Cambridge, let alone Manchester, which is being promoted as the 'MIT of the North.'

So though Stanford Business School must be commended for establishing a programme to help people in developing countries build successful businesses, without equivalent action to reform their financial institutions or local authorities the results are likely to be ineffectual. The West badly needs new models for tackling challenges such as climate change or affordable housing if it is to maintain its lead as a place to live and work. Perhaps the IT industry should enable the lessons to be shared with the rest of the world?

The West Coast is the most advanced part of the richest country in the world. The value of shares in recent start-ups are greater than the corporate giants that have survived the centuries, such as Ford Motor Company, The cities of the North American West Coast North of Palo Alto are without doubt great places to visit and live in, not least because they are bordered by the sea on one side and hills or mountains on the other. Their attractions to people from all over the world help to explain the dominance of the USA in several fields, especially in Information Technology and its related products and services. The role of science parks should be seen as incidental.

However, what the great American economist John Galbraith referred to as 'private affluence and public squalor' still applies over half a century later and holds back future growth. Governments urgently need to find innovative ways of tackling environmental and social issues, and sharing lessons on urban development between East and West before the mistakes are repeated on a global scale. The methods Stanford uses to create business leaders could equally apply to training the leaders of social and environmental change.

3. Growing intelligent or smarter cities

One city that offers a glimpse of a better future is Portland Oregon, which is widely known among urbanists for pioneering the principles of 'Smart Growth'. I was particularly keen to return to Portland to see how it had developed since I visited it fifteen years earlier, since when it has extended its Metropolitan Area Express (MAX) system to link through to the railway station and beyond, and largely completed the Pearl Quarter. Portland is cited as a model city by urban experts such as Bruce Katz, and its slogan is *Keep Portland Weird*. A set of principles that includes Transit Oriented Development(TOD) and Tax Increment Financing (TIF) has been promoted by the Congress of New Urbanism (www.cnu.org), and

has influenced my own reports, for example on land assembly for the Greater London Authority.

I was fortunate in having arranged to meet up with architect planner Charles Kelley, a principal in ZGF Architects which employ 700 in six offices dedicated to sustainability. Esther and I were able to travel out to the suburbs on MAX as well as around the city centre on the separate streetcar or tram system. An excellent book on the city's evolution, purchased from Powell Books in the heart of the regenerated Pearl Quarter, provided fascinating insights into how cities can change through community or grassroots pressures.⁶

Portland's transformation

All along the North American Westcoast strong environmental pressure groups have largely preserved the qualities of the coast and the nearby wooded hills. However, this has often been at the expense of releasing land for development including housing, commercial and industrial uses, except where occasionally new developments have been opened up through investment in rapid transit. Portland was a forerunner in seeking alternatives to the private car, and offers many lessons for other mid-sized cities.

Portland, the largest city in Oregon with a population of 650,000, is regarded by many urbanists as exemplary and offers residents an unspoilt mountain setting only 50 miles from the sea. Properties there cost 20% less than their equivalents in Seattle or San Francisco. Its earlier history of conservatism included racist restrictions on owning property as late as 1972. It also had a reputation for a lively nightlife. Faced with the pressures of urban sprawl, the State of Oregon used planning laws to protect farms and forests through a unique statewide ordinance that established development goals for land across the state. This led to the formation of growth boundaries around the major urban areas that were administered by local government to achieve community-oriented goals. Today a city, once associated with corruption is now known for its progressive politics and environmental achievements. The story of change is inspiring, and possibly replicable.

The transformation began when the City was faced with losing federal government grants unless it improved its air and water quality to comply with nascent EPA policies adopted in 1970. 'The city, business interests, and the local community configured new policies and strategies to change the form of the city, aiming to make Portland a healthier place to live.' Later local opposition to a five mile extension of a freeway that would have demolished fine old buildings, required something different. With a new 32 year old Mayor Neil Goldshmidt, the city engineered the Metropolitan Area Express or MAX.⁸ This was an alternative to the abandoned Mt. Hood Freeway who's proceeds were uniquely repositioned to fully pay for the first leg of the MAX, between Gresham and Portland. This is a 60 mile long light rail system, built in six stages, that draws four counties together and reduces vehicle miles travelled.

The City has applied Transit Oriented Development (TOD), especially in the dense Pearl River District but also in development areas such as along the main river. It used Tax Increment Finance to support new lines, such as the extension out to the railway station and beyond. This involves issuing bonds to private investors based on calculations that the increases in property values will generate enough extra funds to service and repay the debt over a period of twenty or more years. Negotiations over Floor Area Ratios (FAR) are used to get developers to fund public amenities such as parks, and transportation systems such as the first leg of the tram loop.

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⁷ Charles Kelley, ZDF correspondence

⁸ Carl Abbott, Portland in Three Cenuries: the place and the people, Oregon University Press, 2017

The environmental benefits have been well-documented through research, and have led to an *EcoDistrict Protocol*, which forms a model for other Smart Growth to Smart City initiatives. For example, old buildings have been conserved and upgraded in many neighbourhoods, thanks to 'constructive activism' and community engagement since 1976. The Pearl District is exceptional, with its highlight being a very large bookshop in the centre which forms an excellent meeting point. Planning has been undertaken by the Pearl District Neighourhood Association, resulting in mixed use developments with 27% affordable units.

Pre-development strategic planning has supported multiple development agreements, resulting in mixed use developments, such as the Pearl District, with 27% affordable units. Another example is a fine new 'eco quarter' which has been developed along the South Waterfront, served by both the streetcar or tram and MAX. A lively arts scene extends along main roads such as Hawthorne, providing a multitude of bars and places to eat. Happy Hour at the top of a commercial building overlooking the city draws in people from the surrounding area. In Portland there are some 95 neighbourhoods in five main sections, creating many diverse places in which to live.

The local government's *Population Strategy* has combined public transport, neighbourhood revitalisation and downtown planning. Cooperation not competition has been reinforced by citizens voting for bonds to fund improvements. The 'sawdust aristocracy', with their inherited wealth from logging, no longer control the town. Portland has consequently succeeded in growing employment by 2% a year, while the residential population rose by two thirds over a 30 year period, with the central area almost matching the suburbs. Open source modelling has been used to show how pedestrian oriented development can cut travel times. So successful has the model, with its commitment to sharing good practice, that it is being exported to other cities, including in Japan.

Portland's positive plans for what I call **Smarter Urbanisation** have enabled a diverse range of people to live close to the historic centre. The city has conserved and adapted old buildings that in other cities might have been demolished. In the process they support a variety of interesting independent shops and bars, as well as a superb public transport system. Therefore, the centre or downtown area is now very walkable, and there are a variety of neighbourhoods to choose from. Careful zoning makes it possible for manufacturing to thrive, serving other businesses along the West Coast. While there is still plenty of scope for improvement, such as intensifying development along the transit lines out of the city, Portland has struck a balance between social, environmental and economic growth.

4. Connecting places

In our three weeks of travelling between Vancouver in Canada and Palo Alto in Northern California we set out to experience a range of types of transport. Transport systems not only shape the character of cities, and affect how well communities work together, but they also have measurable impacts on pollution and indirectly on global warming. They are highly dependent on geography and population densities but also on political values or priorities. The variety of rapidly growing cities along the way from Vancouver to Palo Alto provided an excellent opportunity to reflect on how to make cities work better through investment in transport systems.

Since I was a student at Stanford Business School fifty years ago cities have sprawled out far further, and the residential population of the West Coast has become much more dispersed. For example, **Vancouver** has some 600,000 residents in a sub-region of 2.5

million. For the Expo in 1986, the city invested in an excellent driverless transit system called the SkyTrain which now connects new developments over three lines and 60 miles of track. Attractive little water taxis, ferries and seaplanes connect the main attraction and residential areas.

Taming the car

The driverless Skytrain lines in Vancouver are extensive, fast and frequent and very easy to use. High density housing schemes are springing up around some of the new stations. The many islands and waterfront locations such as Granville Island are well-connected with attractive little ferry boats, and we later took the fine ferry from Vancouver Island to Seattle. Canada seems to value public amenities. Yet the comfortable government supported Amtrak train runs only four times a day between Seattle and Portland and once to Vancouver, resulting in the service being used primarily by tourists not commuters.

Portland has 650,000 residents in a metropolitan statistical area of 2.2 million, and the city has grown as fast as the surrounding counties. Portland is kept compact by the State of Oregon's Green Belt, a unique application of spatial planning in the USA. It also has a European class public transport system which includes MAX (the Metropolitan Area Express), which has become a model for other cities. This serves three counties through what is known as TriMet, a public agency running all forms of transport. In contrast San Francisco boasts a population of 900,000 but over 7 million live in the wider Bay Area, and congestion is rife. BART (the Bay Area Rapid Transit) has not had the impact that was expected.

Connectivity and congestion

Long commutes in cities such as **San Francisco** result in levels of congestion on the main roads that are quite alarming. The delays cause stress, while the carbon emissions and tyre wear create pollution and harm the health of those who spend most time on the streets. Opposition to extending the Bay Area Rapid Transit (BART) line Southwards means that almost everyone drives in the San Francisco Bay Area, though Uber taxis and Google buses take some of the load at peak times. Apparently, a proposal to open up a river boat to take workers from San Francisco to Google's office was opposed on environmental grounds, and the buses that Google runs have come in for a lot of criticism.

When we were staying in Palo Alto opposite Stanford University Esther and I were driven to see the new 'palaces' of the IT titans of Facebook, Google and Apple. These have clustered in a multiplicity of buildings around Stanford and Palo Alto. There are other clear concentrations: for example bio-medical firms locate near the Veterans Hospital to make experimentation easier and more economic. 17 miles South of Palo Alto lies San Jose. Once known for the song 'do you know the way to San Jose?', it is now dominated by electronics firms and the homes of many 'IT workers', and is extending its own metro system. Los Angeles is yet another transport hub, which is investing in transit schemes because its freeways are jammed, and its air is said to be unbreathable.

In the centre of San Francisco, clustered around the magnificent Salesforce Park stand the towers of the companies that have survived the dot.com boom. The names of familiar people-facing computer 'apps' such as Twitter or Survey Monkey are located where young staff can walk, bike or scoot to work. The park occupies the roof of the new transit terminal, which had only opened a couple of months before our visit and is accessed by escalators or on a gondola or cable car. But many more staff seem to get into cars in their spacious garages and drive to car parks under their offices without ever encountering the realities of urban life. There are only a few suburban passenger railway lines such as the Caltrain,

which we used to get to San Francisco Airport from Palo Alto before changing to BART. The BART train may look modern but is poorly signed with complex ticket machines and does not offer a better alternative to the car or Uber taxi for most people.

San Francisco is known throughout the world for its cable cars. It also has a fine fleet of historic trams from different cities running past the main visitor attractions along Embarcado and the waterfront. The predominantly electrically powered buses in San Francisco were frequent and very easy to use, with friendly drivers and countdown displays. But the occasional deranged passenger can be unsettling. People sleeping in bus shelters or on the pavements were another disincentive to using public transport. San Francisco uses excellent trolley buses and there are count-down times in bus shelters and road crossings. Frequent electric buses also serve Stanford's spread-out campus from Palo Alto's railway station, but other connections are unsatisfactory. Public transport in California is largely left as a service for the poor or the tourist.

In the areas they cover the trams or street cars work well but are slow over longer distances with frequent stops, and Transit Oriented Development is rare. A major housing development of 5,000 homes on 300 acres of former industrial land includes a hospital at Mission Bay looks very promising but has taken over twenty years. There are few other signs of development on the largely vacant land still occupied by the port, and remarkably few tower cranes compared with an equivalent area in London. It seems that land assembly is too difficult, or the political will may be lacking to contend with the opposition that any proposal generates.

Congestion is a consequently a major challenge throughout the Bay Area. Four-lane freeways and flyovers are jammed with traffic crawling along. Even if the cars are much smaller than they were fifty years ago, and often electric, the environmental and health costs are huge. Autonomous or self-driving cars would make little difference. Interestingly where people once lived in Palo Alto's spacious suburbs and worked in San Francisco, the dominant movement is now the other way. Even more travel across the Golden Gate and Bay Bridges going North and East. While new apps for telephones should make ride sharing much easier, and priority is given on some freeways to people sharing a car, so long as parking is easy people with money will prefer to use their cars (or ride electric bikes for more local trips).

A thousand kilometres further North or just over two hours by plane lies **Seattle**, outside which Bill Gates and his Microsoft empire are based, and where Jeff Bezos's Amazon is headquartered. Largely known for its rain and waterfront, in part through films such as *Sleepless in Seattle*, Seattle is a high tech success story. Formerly dependant on Boeing, who manufacture aircraft there, the old joke was 'Could the last person leaving Seattle turn off the lights.'

The story of Seattle's renaissance is brilliantly told in MOHAI (Museum of History and Industry), which illustrates the cluster of companies that are linked together in the fourth industrial revolution. The museum reuses an old Navy building opposite the new housing and office on South Union Lake, once an area of old factories. Next to is the Centre for Wooden Boats where we talked to people enjoying making their own from kits. High accommodation and staffing costs are said to be causing the IT giants to set up further afield from their origins. Nearby apartments are being leased or rented out in residential towers offering social facilities for busy workers. The cluster of new offices and housing springing up around South Lake Union a short tram ride or walk from the centre. Spacious show flats provided a taste of what well-paid staff are looking for and attempts are being made to create a sense of community.

Seattle is also known as the home of Amazon. Hardware once made locally is now made in China and the Far East and shipped into the giant ports along the West Coast, and then trucked out. However, in a fast-moving world, activities are shifting once again. Production is distributed further afield, so that, for example Elon Musk is making batteries for his Teslas in the largest building in the world in the deserts of Nevada. This is partly financed from the money he made from the financial transaction app. PayPal, which again started in Palo Alto. Undoubtedly the West Coast cities have benefitted from their excellent ports and links to the Far East. A few, such as Portland Oregon, have invested in a European style transport system, which is covered in a earlier Postcard.

We took an Amtrak train from Seattle to Portland, both of which have superbly restored stations. Railway services are quite unreliable as passenger trains must give way to long, slow freight trains. I recalled the President of Southern Pacific telling a class at Stanford fifty years ago that he only wanted to carry passengers in six foot boxes, and it seems that rail is not yet seen as a better option to driving. A newspaper article on the recently reopened private train line over 70 miles from Sonoma to a ferry point across the bay from San Francisco's downtown area said it is suffering financially from low usage outside peak hours because the failure to build housing near the stations. The idea of a high speed line to Los Angeles seems fanciful.

Travel is so poorly integrated that the private car still dominates movement. Significantly perhaps the taxis we used in Vancouver, which bans Uber, were most friendly and well-informed, in contrast to some others we used. IT provides instant contact almost everywhere, and people seem to be looking at their phones much of the time. But the casual encounter or even a meal with friends is difficult outside a few favoured places. When walking is only used for exercise, town centres have collapsed to be replaced by home delivery systems.

We spoke to traffic cops on pedal bikes in Seattle who patrol the transit corridors as they say this is where most crime is concentrated. Elsewhere we saw little evidence of public security. The link across El Camino and then under the railway line from the university to the shops and restaurants in Palo Alto is intimidating and lacks proper lights and kerbs. Hotels are designed for motorists.

Mega-commutes from the new suburbs and sub-divisions of more than 90 minutes each way help explain congestion on the roads, and the decline of local shops. 'Edge cities' have been developed where commuters go to shop or take away fast food. But they have not led to housing development where it is most needed, even where transport connectivity has been upgraded. This is not helped by political fragmentation.

So despite its wealth, and huge innovations in technology, the West Coast generally has not yet succeeded in linking up development and transport. Investment in infrastructure and housing is lagging far behind economic development and jobs. IT and public engagement in planning has not yet enabled public transport to compete with personal transport. Housing will therefore form the next postcard in this series.

5. Providing housing

In our travels from Vancouver to Palo Alto we were appalled by the shortages of affordable housing, and the number of people sleeping on the streets. Despite, and possible because of, higher salaries along the West Coast, housing is generally as unaffordable as in London. But the extremes are even more noticeable, as so little is being built compared with the number of jobs that are being created. For example, in a desirable location such as Menlo

Park on the edge of Palo Alto with a population of 35,000, the median house is now worth \$2.3 million, and proposals for building new homes on Stanford's campus were turned down. Typical houses are built at a density of four to the acre around a large garage, and generally seem to be on one storey only. So sprawl is predictable.

Visitors from Europe may be shocked by the large numbers of people sleeping in the streets, in tents and in cars or even vans. California is the richest state in the richest country, yet 45,000 sleep on the streets of Los Angeles, up 50% since 2009. The numbers have also risen by 35% in Seattle and 18% in San Francisco. Half the nation's homeless are in California. So as Marvin Gave asked in his famous song what is going on?

The admirable Housing First policy does not seem to have overcome a problem of people sleeping in bus shelters in the city centre, or vehicles further out, as many have multiple problems in a state without a safety net. Rapid growth without proper spatial planning and development has produced displacement on what Europeans would consider an unacceptable scale. The title of the 2019 film *The Last Blackman in San Francisco* says it all. Requirements that houses should be of a minimum size or density or that developers should achieve 'higher standards' are as effective as earlier segregation policies in keeping the poor 'in their place.' Quality comes at a cost for someone.

New housing and the homeless

The visible homeless has generated a host of research in each of the cities we visited. A book on the loss of low rent housing and hotels in the Mission District of San Francisco (where I had stayed fifty years ago on a weekend urban studies course) criticises city policies for enabling a former working class area to be gentrified. This was against considerable community opposition. The book concluded that community land trusts were needed to give poorer people a chance in competing for space. Homeless people sprawled over pavements or standing together in run-down areas are sign of failed urbanism. They must deter some people from using the streets and their shops and encourages them to use their cars instead or stay at home.

Jobs for those without qualifications have contracted. Menial jobs such as dealing with passengers at airports have either been replaced by machines or recent immigrants with poor English. It seems as if the attempts to open middle class opportunities to ethnic minorities in the wake of Martin Luther King's assassination have only partly succeeded. It is the poorest who suffer most, as stories about the homeless bring out. Even in progressive Portland some 2% or 38,000 of Portland Metro's population at some point in 2017 or seven times the official tally. In San Francisco the total is put at 10,000 and has been expanding rapidly, with job loss being the most common cause and with alcohol and drug addiction accounting for 18%; in other words most down and outs start off a quite ordinary people! Research publicised in *The Economist* argues that San Francisco's policy of rent controls has perversely reduced the supply and therefore increased the cost of rental accommodation. ¹⁰

My greatest surprise was not just the numbers of homeless people, including those living in camper vans to be near their work in Palo Alto, but the apparent loss of black Americans from the areas where they once lived. Extensive research in *The Road to Resegregation* by Alex Schafran discovered that there had been a movement Eastwards away from the jobs on which they once relied, and into post-industrial areas in isolated suburbs to the East of

⁹ James Tracy, Dispatches against Displacement: field notes from San Francisco's housing wars, AK Press, 2014

¹⁰ Urban Myths, The Economist October 19 2019

Oakland across the Bay from San Francisco. Competition for service jobs makes it hard to cover the cost of living. Despite occasional attempts to develop affordable housing the economic dynamo of Information Technology may be widening the gaps between rich and poor .A series of waves may be discerned.

Development waves

In what ways are the new jobs and the new homeless connected? As with new technology, the development process seems to proceed in waves or surges, responding to both fashions and market trends. The first wave, as in London, saw the loss and possible eviction of poorer people from multiply occupied old houses in poor condition, and their restoration for single families. This is what the English sociologist Ruth Glass called 'gentrification', but which becomes displacement when it happens too rapidly.

Thus Haight Ashbury, which in the 'Summer of Love' of 1969 was known as a largely black and run-down residential area, is now a smart place to live. Its restaurants and boutique shops attract visitors, and as it is close to a fine park, is a great place to bring up a family if you have lots of capital or high paying jobs. Similarly, fine old middle class houses in Capitol Hill in Seattle are being extended or in some case redeveloped as apartments. In the process fine historic areas have been conserved and restored to high standards.

A second wave affects mixed use inner city areas such as East Palo Alto, where low density activities are being replaced by higher quality new housing. The development process seems as protracted as the UK, with many disputes to be overcome. Hence we were delighted in Portland to stay near a large area still occupied as an 'industrial sanctuary'. A nearby neighbourhood known as Ladd's Addition was built on garden city lines to a plan by Olmsted, the famous landscape architect's stepson, and has been beautifully conserved. We met people who had moved there from San Francisco. The main street is being promoted as the Hawthorn Quarter with funky places to eat, drink and stay, and there were signs of small infill development. But Portland's policies are exceptional.

Generally, we saw few examples of building affordable or ordinary housing, despite large areas of under-used land alongside railway and rapid transit lines. Vancouver was exceptional with its high rise suburbs along the routes and even at the end of a rural branch line. The old railway yards at Yaletown in the city centre have been regenerated as a thriving mixed use area. Something similar has been tried in Gastown, by restoring the old street surfaces and adapting old industrial buildings to new uses. However, we were surprised to come across a whole street of apparent outcasts while walking away from the riverside towards Chinatown.

Building high

It is the third wave or tide which could have the most impact, as young people choose to live in city centres. Large central areas are being redeveloped to rent or lease as 30 or 40 storey office and housing towers, most strikingly around San Francisco's Salesforce Park. This is named after a major software supplier, which describes itself as the 'world's #1 CRM', which stands for Customer Relationship Management, and which leases some of the nearby office space. The apartments have access to fine landscaped areas complete with cafes which provide social spaces for those who live and work there.

Earlier we had visited three new tower blocks near Seattle's South Union Lake to explore how new residents are living. Though a law prevents making information available on the kind of resident, the spacious apartments are being leased out, not sold, to those who want style and location, which must include the workers in IT. German gas cookers are provided even though residents may never use them, preferring instead to heat up deliveries. Social

spaces and gyms are there to support interaction (but looked unused). The views out are fantastic, and many have large balconies. The marketing staff emphasised the environmental features and the energy performance, which was assessed as gold or platinum. So why should one be concerned?

These towers do not solve the basic problems of matching demand with supply and may inflate prices and hence land values. They can only be afforded by those earning the highest salaries. Let on annual leases, they do not allow residents to accumulate capital, or do much for themselves. This may be fine for young IT workers on salaries of over \$100,000, but what if there is a recession? With high rents how can the residents ever repay loans or move on? How will children cope with a lack of public open spaces, especially if both parents are working? Where is the support from traditional neighbourhoods to come from for those who are on their own?

The high rentals and number of floors may be explained by developers as the result of high land values. Land values are the residual of what people will pay in rents, the costs of construction, and the availability of finance, and hence are ultimately set by what occupiers will pay. But the high costs of luxury apartments increase unaffordability. They encourage densification on a grand scale. I was told by a leading architect from my class at Stanford Business School that construction costs for tower blocks are some three to four times the cost per square foot of lower rise buildings. Cheaper buildings can be built out of wood not reinforced concrete. The rewards mainly go to those that supply capital, not to the occupiers.

Financing is also much more expensive when several hundred apartments need to be occupied before loans can start to be repaid, and so too are the required profit margins. The land assembly costs tend to be excessive, especially when owners speculate about hope value, which no doubt results in land being withheld from development. Hence the failure to make land available for new settlements is creating a new kind of slavery or bondage and leaving growing families without any security for later life.

Land values and Silicon Valley

A fascinating set of articles on *Who Owns Silicon Valley*, commissioned by a set of Bay Area newspapers, throws some light on the impact of landownership on the escalation of housing values. ¹¹ The articles are based on the analysis of thousands of property records from the Santa Clara County Assessor's Office, which covers all the principal 'hi-tech' companies, and also Stanford University. It turns out that the ten largest owners control more than 11% of the taxable property in the county (which covers land, buildings and equipment).

Stanford owns by far the largest area, and its investment amounts to \$19.7 billion of taxable property in 2018. The next largest holdings were Apple with \$9 billion and Google with \$7.5 billion, which has been accumulated in a far shorter period. In contrast the Cisco Systems and Intel, who make the silicon chips, have properties worth \$3.4 and \$2.5 billion respectively. The largest property company The Irvine Company, which built a whole new town, has property holdings worth \$5.9 billion. The combined value for the ten largest owners has risen by 350% in 24 years. The term Silicon Valley was only coined fifty years ago, during which time a digital revolution has taken place which some call the Fourth Industrial Revolution.

The explosion in land values is blamed for causing the housing crisis, and which makes the efforts of companies like Google to build for their staff look like too little too late. In a state where it took 15 years to get planning permission to build 180 houses on the Stanford campus, the situation sounds remarkable like the story in other hi-tech areas such as in

¹¹ Leonardo Casteneda Who Owns Silicon Valley, three articles in The Bay Area news, November 3 2019

Oxford and parts of London. For example, house building is currently said to be stalled due to the high costs, and housing costs could put a brake on the economic dynamo. Yet we saw plenty of under-used land by the side of the railway and also along the edge of the Bay.

The shortage of land for housing is said to be because environmentalists, business groups and localism won out against those concerned with social justice, and race issues. Alex Schafran concludes in his study of local politics that 'major interventions that could have possibly changed the direction of the region did not occur'. Instead the overall result of a free market system is not Smart Growth but chaotic sprawl and widening divides. These hurt almost everyone.

In 2008 the over-selling of mortgage backed securities, based on poor families who could not afford them, brought the world's financial system to the point of collapse. Schafran comments in his book that people in California voted to 'pay for much needed wetlands restoration. Overcoming segregation and spatial inequality were another matter.' Earlier the great American economist Kenneth Galbraith wrote over 60 years previously about 'private affluence and public squalor'. Half a century later this is still true in the richest part of the world and in places where ecological and environmental thinking is most advanced.

The roots of the problem may lie in popular values that sets the interests of the individual over the common good. and wed people to their cars. The individualistic tradition forged in the American West inspired the philanthropic efforts of business leaders like Stanford or Henry Kaiser (who built Liberty ships in the Second World War in Portland and Vancouver and established a leading health foundation). On the positive side this has resulted in great universities and to works of art being accessible to the public. But is has also removed hope for masses of people. It is easy to see why many Americans who live in large comfortable suburban homes distrust the work of government and prefer to rely on foundations and voluntary enterprise instead. It is also easy to see why President Trump has become popular.

In summary a free market system, supported by government, has created immense accumulations of private wealth. But a system in which planners largely respond to private proposals is not producing enough new housing to keep pace with the demand generated by a booming economy. At the same time many who lose their homes, perhaps the result of a family or other breakdown, can no longer afford to access the private rental market. But the cities are slow in addressing the great global issues of poverty and climate change. The speed of housing development lags far behind technological change and the growth of the economy. In time this may cause the economic dynamo to slow down, as well as making it harder to address the causes of climate change and population migration.