VIEW FROM THE CHAIR – COLIN PULLAN

As the new chair of the Urban Design Group (UDG), I would firstly like to thank my predecessor Katy Neaves for her work over the last two years. Also, thanks are due to the members of the Executive Committee, regional representatives and our Director Robert Huxford for all of their efforts, as well as the new members of the Executive Committee, and Paul Reynolds, who is now the UDG Secretary. As chair, I find myself in the enviable position of being surrounded by a wealth of design talent that shares a common objective and interest in the built environment. Magic!

What attracted me to urban design? I have a long addiction to 2000AD – a 1970s science fiction comic (and still going strong) - which portrays a futuristic dystopian, dysfunctional life in city blocks within mega cities that cover most of our urban areas. The vision was fascinating and foretold initiatives such as the elimination of smoking from public spaces; ‘Mega City One’ banished smokers to special smokatoriums. I have an ambition to get one of the authors to explain themselves to the UDG one evening... But this wasn’t my principal motivation. As with most designers, it was opportunity. Having never quite got to grips with physics or creating modernist Lego houses (other bricks are available), architecture was not for me. Planning was interesting - my degree is in planning - but I soon discovered the Joint Centre for Urban Design at Oxford Polytechnic where in the

THE DIRECTOR’S NEWS

In July, Louie Sieh, convenor of the Urban Design Book Award, relocated from London to Hong Kong. We were pleased that she agreed to continue in the role, even though she is now far away. The internet has made it as easy to contact someone on the other side of the planet, as the other side of an office. The internet is changing business practice, lifestyles and the shape of towns and cities. But another change has had a far greater impact. It is illustrated by the stunning view from Louie’s apartment, of the North Lamma anchorage area in Hong Kong – part of one of the busiest seaways in the world.

The ship pictured is a container vessel built in 2012, capable of carrying 13,000 20 foot ISO shipping containers, up to 80,000 tonnes. It takes the vessel about 4 weeks to travel from China to Europe, through the Suez Canal. Containerisation and container ships are city and nation changers. Containerisation led to the closure of traditional docks, and thirty years later some are now among the most valuable real estate, although many are still wastelands.

The articulated lorries that transported containers became the dominant criteria in highways design, with the width of streets and junction radii dictated by their dimensions. Unfortunately some highway authorities still require high street junction designs that are HGV focused, rather than people focused.

DIARY OF EVENTS

WEDNESDAY 16 NOVEMBER
Food and the City
A focus for regeneration? A catalyst for stronger communities? A contribution to reduced food miles and environmental impact? A means to improve the health and wellbeing of the population and reduce obesity? Featuring the theme in Urban Design 140.

Look out for December events on the UDG website!

Note that there are many other events run by UDG volunteers throughout the UK. For the latest details and pricing, please check on the UDG website www.udg.org.uk/events/udg

URBAN DESIGN — AUTUMN 2016 — ISSUE 140

Colin Pullan, Urban Design Director, NLP Planning

Robert Huxford

The articulated lorries that transported containers became the dominant criteria in highways design, with the width of streets and junction radii dictated by their dimensions. Unfortunately some highway authorities still require high street junction designs that are HGV focused, rather than people focused.

What do I get from the UDG? Some 25 odd years later, I am still playing at design and – here is the best bit - I have not stopped learning. Even though more people can see that streets make great places to live, the development industry is now familiar with the perimeter block, and we believe that Manual for Streets 2 has nailed it, there are as many challenges facing designers now as there were then. Some are new, and some a variation on a theme,... enter the UDG.

So what am I currently interested in? The mega city future? Tall buildings? Driverless buses? No, it is the bin and how the relatively straightforward need for servicing development can negatively impact upon everything else. It is not a sexy issue and I do not have a passion for refuse trucks themselves, but ask yourself: how often has your building, street space and material specification been compromised by bin stores and the turning requirements of a thirty tonnes monster?

The final change has been about economics. These very large container ships have reduced the cost of international freight so that the combined costs of hauling a container by road from factory-to-port and port-to-distribution depot are the same as shipping the container half the way around the globe. Factory workers in the developed world are in direct competition with people in developing countries who are paid just a few dollars a day. They have contributed to the long-term decline in traditional manufacturing communities, such as the Rust Belt in the USA and the north-south divide in the UK. Equally they have brought jobs, opportunities and increased income to those living in developing countries. The impact of containerisation shows the importance of understanding urban design at a global level. We should also remember the importance of maintaining contacts, friendships and goodwill, the world over. We wish Louie well in her new home.

Robert Huxford
Contents

This issue has been generously sponsored by GreenBlue Urban

COVER
Eagle Street Rooftop Farm, Brooklyn, New York. Photography by Elizabeth Reynolds

FUTURE ISSUES
UD141 Africa
UD142 Health, Ageing and Urban Design
UD143 Estate Regeneration

UPDATE
3 — Kevin Lynch Memorial Lecture, Sir Terry Farrell
3 — Industry and Urban Design
4 — Street NW Manchester 4x4
4 — The Byzantine Peloponnese
UDG Study Tour
6 — Urban Design Group AGM
7 — Urban Design Library #19
8 — My Favourite Plan

VIEWPOINTS
9 — Safeguarding Quality via Permission in Principle, Matthew Carmona
10 — Street, Not Highway, Design, Michael King
12 — Influencing Inequalities in Urban Renewal, Rowan MacKay

TOPIC: FOOD AND THE CITY
14 — Food and the City, Jane Manning
16 — Food and Urbanism: Connecting Urban Design and Food Space, Susan Parham
19 — Edible Urbanism – London’s Next Foodie Trend? Elizabeth Reynolds
21 — The Productive City: Urban Agriculture on the Map, Katrin Bohn and André Viljoen
24 — Towards an Indigenous, Sunlit, Rooftop Food Production, Oscar Rodriguez
28 — Urban Farming and Family Farms, Olusola Olufemi
31 — Edible Eastside, Jayne Bradley Ghosh
34 — Allotment of the Future, Helen Grimshaw and Jie Lu
36 — The Food Parliament: An Infrastructure for Resilience, CJ Lim
39 — Food and the City Reviewed, Jane Manning

BOOK REVIEWS
40 — Re-framing Urban Space, Urban design for emerging hybrid and high-density conditions, Im Sik Cho, Chye Kiang Heng and Zdravko Trivic
40 — Rethinking Smart Cities From the Ground Up, Tom Saunders and Peter Baeck
41 — The End of Automobile Dependence. Peter Newman and Jeffrey Kenworthy
41 — Also Received: 21st Century Garden Cities of To-Morrow, A Manifesto, Philip Ross and Yves Cabannes; Context, Architecture and the Genius of Place, Eric Parry

42 — PRACTICE INDEX
47 — EDUCATION INDEX
49 — ENDPiece
Plant room, Joe Holyoak

Urban Design Group
CHAIR Colin Pullan
PATRONS Irena Bauman, Alan Baxter, Dickon Robinson, Helle Søholt, Lindsey Whitelaw and John Worthington

Office
Urban Design Group
70 Cowcross Street
London EC1M 6EJ
Tel 020 7250 0892
Email administration@udg.org.uk
Website www.udg.org.uk

Editorial Board
Matthew Carmona, Richard Cole, Tim Hagyard, Joe Holyoak, Sebastian Loew, Daniela Lucchese, Jane Manning, Chris Martin, Malcolm Moor, Geoff Noble, Judith Ryser, Louise Thomas

Editors
Louise Thomas (this issue)
louisethomas@tdrc.co.uk
and Sebastian Loew
sebastianloew@btinternet.com
Book Review Editor
Jane Manning

Design
trockenbrot
(Claudia Schenk and Anja Sicka)
www.trockenbrot.com

Printing Henry Ling Ltd
© Urban Design Group ISSN 1750 712X

Advertising enquiries
Please contact the UDG office

Material for publication
Please send text by email to the editors. Images to be supplied as jpg
Living with Brexit

Events this year have triggered changes in the way that we view other people. The use of public space and places of social gathering appears to be, and perhaps has become less safe, given the recent levels of terrorism. Public space is now being observed and guarded much like privately controlled spaces, and as a result creates an urban design dilemma. We appreciate the reassurance that the presence of other people in public space does not constitute a threat, but as urban designers we strive to create public places which can be used freely and without a second thought...

In this issue of Urban Design, we explore the topic of Food and the City, expertly curated by Jane Manning: it is a good example of how the Brexit vote is causing uncertainty. As several authors note, Britain’s food supply and prices are likely to be significantly destabilised by Brexit, as many agricultural workers may not be eligible to work here, and our dependence on produce from our now disaffected neighbouring countries increases. In the last three years, this journal’s topics have ranged from Tall Buildings, Industry and Urban Design, Designing Housing, The City as Developer, Garden Cities, Greening the City, Urban Design and New Technology, Waterfronts, Central and Eastern Europe, Market Towns, to Art in the Public Realm. It is hard to imagine how parochial these topics would have been without articles about European practice or written by contributors with experience of living and working both in Britain and Europe. Each year, contributions from our European colleagues equate to around a third of Urban Design’s pages. Therefore it is in all of our interests to work hard to maintain an ethos of openness and of sharing new ideas, so that we can learn about best practice from all sources of expertise.

Louise Thomas, joint editor and independent urban designer
The City as a Tangled Bank, Kevin Lynch Memorial Lecture by Sir Terry Farrell

The Gallery, London, 8 June 2016

Is Terry Farrell an optimist? Judging by the many impressive ideas he has pursued with perseverance during his long career, he must be. At the very least his explorations of urban history as a means to direct his own interventions, together with his visions for future urbanity, reveal his passion for dealing with the complexity of cities. His inspiration also comes from nature, abstract representations such as maps, and past master-planners. His perception of the dynamics between Trafalgar Square – the people’s place, Parliament Square – the heart of law and order, and Buckingham Palace – the monarchy, and how these seats of power and influence seep out into their surroundings and define their urban character, is an example of what needs to be understood for better integrated connectivity, or seeing the ‘place as client’.

Farrell has redesigned large chunks of London’s fabric, at Old Oak Commons or Earl’s Court. Some of his schemes counteract the adverse interventions of previous planning philosophies, such as the abolition of underpasses or the prevention of the Mies van der Rohe’s tower and monumental square in the medieval City fabric. Although sometimes in opposition to mainstream politics, his ideas are reaching the establishment. An example of this is his blue-green plan for the Thames Estuary where he demonstrates that the ambitious housing targets of the then government could be easily accommodated in this vast area, and turn London into a national park city.

Ecology and the importance of green spaces in cities are reflected in many of his projects. He showed that London and Hong Kong share the same ratio of green to built-up areas; the former’s open spaces are woven throughout the urban fabric, while the latter is built as a ribbon on the edge of nature reserve. The importance for urban design interventions is to understand the urban grain and work creatively with it. He sees suburban gardens as precious ecological assets that should not be concreted over as they, together with its 8 million trees, contribute to London’s biodiversity and micro-climate.

Acknowledging the shift from civic spaces traditionally provided by the state, to hybrid private sector-dominated estates, he sees a publicly accessible and well-maintained realm as an essential feature of future urbanity. What counts is the quality of urban spaces, the diversity of city fabric, and accessibility – very much the role of urban design guiding the interventions of all built environment professions. This idea underpinned his initiative to create the Urban Design Alliance to raise the awareness not only of the importance of urban design for the main built environment professional institutions, but also its economic merits. Together they could foster integrated sustainable urban growth.

During a lively discussion Farrell focused on the practical applications of his ideas, highlighting the interdependence between urban design and politics.

Judith Ryser, researcher, journalist, writer and urban affairs consultant to Fundación Metrópoli, Madrid

Industry and Urban Design

The Gallery, London, 13 July 2016

Emilie Leclercq, topic editor of UD138, introduced three speakers: the first was Juliana Martins, from the Bartlett UCL, who looked at the role of urban design in relation to creative production in the city. Creative cities, clusters and industries are relatively new, reflecting changes in production processes and connections between culture and economy. Creative industries are urban and attracted by city life; close proximity encourages interaction and creativity. This partly explains the concentration of media and IT businesses in Shoreditch, in buildings vacated by earlier industries. These buildings provide the right kind of spaces for innovative ways of working and a mix of activities, including social exchange. Having analysed this, Martins wondered whether the area represented good urban design, as it would be difficult to design and represented a fragile ecosystem. Jessica Ferm, also from the Bartlett, then spoke about the loss of industrial land in London, which was much greater than planned. Industries, which service the city, provide jobs and make areas vibrant, have trouble finding space in urban areas, and so move out. This spiral of decline fuels property speculation, forcing more industries out. Ferm acknowledged that London has a growing population and a housing crisis, and therefore competition for land is fierce. But she suggested that policies are needed to accommodate both housing and industry, and mixed use is too weak a term. More leadership from the Mayor and demonstrations projects would help.

The scale of the talks changed with Tim Catchpole’s presentation on industrialisation in the ‘new world’. He began with successful British industrial towns and villages (e.g. New Lanark, Saltaire, Bourneville, Port Sunlight), where good facilities and a pleasant environment led to happier workers and higher productivity. Translating these principles to huge industrial centres in the Middle East or Asia has been much more difficult; Jubail in Saudi Arabia was the only example that had been successfully completed. Crucially it has high quality infrastructure, facilities, urban areas and good environmental practice. Some ideas were challenged in the ensuing discussion and questions asked about how to keep manufacturing alive in existing busy urban centres.

Sebastian Loew, architect and planner, writer and consultant
May 2016 saw the return of the Manchester 4x4 Lecture Series, an event which STREET NW has proudly sponsored for the last three years. The format this year was the same as in previous years: four events every Wednesday evening in May, each with four guests speaking for 15 minutes each. This year’s theme was The Big Questions – Money, Love, War and Peace, and Freedom.

Money proved to be a fiery first subject. Talks ranged from the role of money in the profession of architecture, inequality and different ways of measuring wealth in cities, to temporary urbanism and its effect on the built environment.

In Love, the second event, Mick Timpson asked us all to love what we do and to love how we do it. Community participation, architecture, space and poetry were explored, as well as a personal account from Sophia De Sousa of her love affair with the built environment and in particular the city of Florence.

The third event on War and Peace explored the themes of architecture in conflict, the battles we face every day just to find our way around public spaces, and designing for post-war housing in conflict zones.

In Freedom, the final event explored freedoms in design and public spaces, the concept of people choosing to live in cities or conversely in suburbia to be free, the freedom of civic places, and protest in the public realm.

Manchester 4x4 is an annual event and we are looking forward to being evolved with next year’s programme which promises to be just as engaging and topical. Be sure to visit our Facebook page for more information on this and other on upcoming events in the North West. https://www.facebook.com/Street-North-West-Urban-Design-Group.

Harriet Harkis and Mark Foster, STREET NW coordinators at Turley

UDG Study Tour: The Byzantine Peloponnese

4–12 June 2016

Thirty five UDG members, spouses and friends set off from London to look at the Byzantine urban heritage of the Peloponnese, studiously ignoring classical sites apart from the Athens Acropolis.

Some Byzantine towns evolved from classical origins, losing their public buildings and spaces, but gaining merchants’ houses and market places. However, many of the classical sites proved indefensible in more turbulent medieval times, and new foundations in more easily defended positions gained greater importance.

MYSTRA

Mystra, the seat of a despotate encompassing most of the Peloponnese, occupies a precipitous site outside ancient Sparta, with a 12th century citadel capping the rocky summit, and the ruler’s palace and attendant churches on the upper slopes. Sinuous streets snake down into a lower walled enclosure encompassing merchants’ houses and the cathedral. With Constantinople in terminal decline, Mystra became during the 14th and 15th centuries the principal cultural and intellectual centre of the Byzantine world, taking inspiration in its architecture and urban layout from the mother city. From its original population of 20,000, decline set in under Turkish occupation, until the town was finally evacuated following fires during the Greek War of Independence. Today the site is under archaeological investigation, though a number of fine churches and merchants’ houses are still standing and the despot’s palace is being rebuilt.

We were impressed by the continuity of Byzantine ecclesiastical architecture and wall painting, which maintains a more or less unbroken stylistic line from the Aghia Sofia in Constantinople through to the 19th century, even under Turkish domination.

Mystra’s port of Monemvasiá, founded in the 6th century on an impregnable rocky promontory, rapidly outstripped its parent city in importance, gaining a population of 60,000, and profiting not only from production of the famous Malvasia wine, but also from piracy. The majority of housing was in the upper town, on the summit of the rock, which retains its defensive wall and massive cisterns to enable the town to withstand a siege, but is otherwise a series of ruins and inaccessible due to archaeological investigation. The lower town, on the southern slope of the rock, is also enclosed within a defensive wall, but retains its labyrinthine network of streets, a fine central square and a substantial cathedral, the largest in southern Greece. Though, by the Second World War, the town had declined to house just a handful of families, much restoration and reconstruction has since taken place, to the extent that the town now gives an excellent impression of how it must have been in its heyday. This is despite the fact that most buildings now accommodate guesthouses, second homes, cafés, restaurants and craft shops.

THE FRANKISH INFLUENCE

By way of contrast, we visited a trio of small towns, Dimitsána, Stemnitsa and Karítena which owe more to the Frankish domination of the Peloponnese, or Morea as it was then called, during the 13th century, after the Crusaders’ sack of Constantinople. Teetering above the Loúsiós gorge, those towns profited from water-powered milling of various products from grain to gunpowder, but at Karítena, the Frankish Castle, perched on a pinnacle, testifies to a more warlike past. In all three towns tall, squarish belfries from the Frankish period give the skyline a more Western-European look. From the 10th to the 17th century, the inaccessible sides of the Loúsiós gorge was attractive to monastic orders that built about four monasteries
precariously cantilevered out from the cliff fence, some of which continue in their original use.

MANI
The building of roads in the 20th century changed the face of these towns, which were previously laid out around a network of donkey tracks. The abandonment of the donkey track network coincided with rural depopulation and the abandonment of whole villages in the Mâni, a remote peninsula in the south-west corner of the Peloponnese. Villages in this area are characterised by tower houses, necessitated by the inter-clan blood feuds which prevailed from the 14th century onward. More recently tourism has resulted in an influx of investment in holiday homes, which, though following the tower house design code, are more accessibly located on the modern road system. The historic villages remain abandoned and in a state of decay.

ATHENS 2004 AND THE RECESSION
We were also interested in the state of modern Greek infrastructure after eight years of financial crisis. The Athens Olympics of 2004 saw the opening of a new airport and metro lines, and a dramatic wide-span bridge over the mouth of the Gulf of Corinth at Pâtras designed to speed access from Athens to northwest Greece. Unfortunately the economic boost forecast as a result of the Games did not materialise, and a motorway linking Athens to the bridge is only now under somewhat desultory construction. We travelled on a new high-speed railway from Athens which was also intended to reach Pâtras, but was only completed to just beyond Corinth. Some stations have been built, but are not linked by tracks, and a resumption of works is not foreseen anytime soon. Meanwhile the metre-gauge network which the new line was designed to replace has closed and most towns are only linked by bus. The recent opening of a new motorway to Kalamâta in the southwest Peloponnese has spelt the end of rail access to the region. Apparently the building of Greece’s original railway network using German loans in the 1890s also bankrupted the government; how history repeats itself!

Alan Stones, architect-planner, urban design consultant and former Head of Design at Essex County Council
**Urban Design Group’s Annual General Meeting**

The Gallery, 70 Cowcross Street, London, 8 June 2016

Urban Design Group (UDG) Chair Katy Neaves highlighted the following points in the Annual Report to 29 February 2016 before stepping down, and handing over the role to Colin Pullan for 2016-17. Colin thanked Katy for her leadership over the last two years, which has helped to sustain the Group during a period of personnel change.

**MEMBERSHIP**

Memberships have decreased this year mostly in the individual and practice subscription categories; however, Recognised Practitioner memberships continued to increase, as did local authority, university and library subscriptions. Overall, paid memberships have declined since 2015; on the other hand, the take-up of the Urban Update e-bulletin has increased.

**URBAN DESIGN JOURNAL**

Urban Design has seen a number of very high quality contributions this year on topics such as: *The City as Master Developer, Designing Housing*, Latin America, and Industrial Urban Design. Members are encouraged to contact the editors with subjects that they would like to cover in future issues.

**NATIONAL URBAN DESIGN AWARDS 2016**

Led by Awards Chair Noha Nasser, this year’s awards event at the Victory Services Club in March was very successful, with a record attendance to-date. It was generously sponsored by Marshalls, and the Francis Tibbalds Trust continued to give its generous support through the provision of financial prizes in the Practice and Student categories. The finalists and winners for 2016 were as follows:

- **PRACTICE AWARD** Joint Winners – Baca for Eiland Veur Lent, Nijmegen and IBI Group for Barnsley Town Centre
- **PUBLIC SECTOR AWARD** – Stockton Council for Stockton High Street Regeneration
- **STUDENT AWARD** – Sama Jabr, University of Strathclyde for A New Laurieston
- **BOOK AWARD** – Young – Old: Urban Utopias of an Aging Society by Deane Simpson (Published by Lars Müller)
- The LIFETIME ACHIEVEMENT AWARD was given to Professor Bill Hillier

**EVENTS – LONDON**

The UDG has continued to develop and expand its ambitious programme which now includes around 20 events per year at Cowcross Street alone. Led by Paul Reynolds, the 2015-16 programme included presentations, discussions, a film night, and walks.

**URBANNOUS – VIDEO ON DEMAND**

Thanks are due to Fergus Carnegie who continues his largely voluntary work to record the UDG’s monthly events at Cowcross Street, making them available to a global audience through the UBNous website. This is a great resource and a tremendously valuable archive of the huge number of presentations given at the UDG over recent years. In the past 12 months the visibility of the lectures on the site has been greatly enhanced by the development of a subject index.

**UDG REGIONS**

Colin Munsie continued as UDG Vice-Chair for the regions, working to strengthen the Group’s links throughout the UK and beyond. The following are leading events in these areas:

- **Solent**, Peter Frankum
- **East Midlands**, Laura Alvarez
- **North East**, Georgia Giannopoulos
- **North West**, STREET NW Mark Foster, Harriet Harkis and Rebecca Newiss
- **Scotland**, Francis Newton and Jo White
- **Yorkshire**, Rob Thompson
- **Wales**, Noel Isherwood
- **West Midlands**, Michael Vout

**URBAN DESIGN STUDY TOURS**

This year’s study tours have been to Toulouse and the Bastides of Gascony led by Alan Stones, and Hamburg including Hafen City & IBA led by Sebastian Loew.

**URBAN UPDATE**

The UDG’s email newsletter continues to be a valuable resource for urban designers, and is received by around 2,000 individuals. It is hoped that the newsletter will become more regular over the coming year.

**FINANCIAL REVIEW 2014–5**

<table>
<thead>
<tr>
<th>INCOMING RESOURCES</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions</td>
<td>£100,072</td>
</tr>
<tr>
<td>Publications and Awards</td>
<td>£40,039</td>
</tr>
<tr>
<td>Conference Fees &amp; Sponsorship</td>
<td>£20,213</td>
</tr>
<tr>
<td>London events</td>
<td>£1,912</td>
</tr>
<tr>
<td>Donation from Urban Design Services Ltd</td>
<td>£26,102</td>
</tr>
<tr>
<td>Activities to Generate Funds</td>
<td>£338</td>
</tr>
<tr>
<td>Interest Received</td>
<td>(£3,600)</td>
</tr>
<tr>
<td>Inland Revenue: Gift Aid</td>
<td>£458</td>
</tr>
<tr>
<td>TOTAL INCOMING RESOURCES</td>
<td>£185,976</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESOURCES EXPENDED</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Charitable Expenditure</td>
<td>£57,846</td>
</tr>
<tr>
<td>General</td>
<td>£72,019</td>
</tr>
<tr>
<td>Conference Expenditure</td>
<td>£18,395</td>
</tr>
<tr>
<td>Governance costs (accountancy)</td>
<td>£1,200</td>
</tr>
<tr>
<td>TOTAL RESOURCES EXPENDED</td>
<td>£149,360</td>
</tr>
<tr>
<td>INCOME FOR THE YEAR</td>
<td>£36,616</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FUND BALANCES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BROUGHT FORWARD</td>
<td>£140,734</td>
</tr>
<tr>
<td>FUND BALANCES</td>
<td>£177,350</td>
</tr>
<tr>
<td>CARRIED FORWARD</td>
<td>£177,350</td>
</tr>
</tbody>
</table>

| CURRENT ASSETS | £182,418 |
| CURRENT LIABILITIES | £5,069 |
| TOTAL NET ASSETS | £177,350 |
Fourty years ago, Barbara Ward, stood in the Habitat Forum in Vancouver to share her passionately held views with a large audience. 1976 marked the first United Nations Habitat conference on Human Settlements. She had chosen that venue in preference to Vancouver’s CBD where the official United Nations conference took place. Young activists, alternatives and artists had shaped the People’s Forum from drift wood on Jericho Beach, some five kilometres west of downtown Vancouver peninsula. Ward was President of the International Institute for Environment and Development, which she created in 1971. She saw the environment and the preservation of the planet as linked to the survival of all humans at an adequate standard of living. This was to be achieved through sharing and redistribution between rich and poor countries and regions. She refers to ‘outer limits’ of the caring capacity of the planet and to ‘inner limits’ meaning adequate quality of life for all. She had already written Only One Earth in 1972 with Rene Dubos and coined the expression ‘sustainable development’ on which the book still is. This could either mean that the world has not progressed much since then, or that she was very long-sighted in her vision of the future and what was essential for a sustained good life, namely using the planet’s resources with care.

From her perspective as an economist and government adviser, efficiency figured highly in her work on resource consumption, but also urban management with an emphasis on the need to redistribute wealth, not as hand-outs, but as a means of self-development, self-reliance and capacity building, and dealing with urban and rural issues. In her view, education was the key to emancipation, leading also to greater consciousness of the worth of a finite planet, which required housekeeping and the conservation of its ecosystem to remain capable of accommodating rapidly increasing populations and their aspirations. She embraced the ‘small is beautiful’ philosophy without naming it, with an emphasis on community responsibility and autonomy, accessibility rather than mobility, equity instead of choice. She sympathised with Jane Jacobs’ pragmatic activism, but her interest lay in the developing world. She embraced information and building technologies, and was in favour of resorting to all means to improve living standards within the limits of the planet.

THE BOOK AND ITS MESSAGE

The structure of the book consists of short sections grouped into six parts. In The Coming of the City she starts with the origin of the city, planned or unintended. In Into the 20th Century she focuses on the period of sanitation, rapid urbanisation, the effects of the car, and the city of a transactional society. The Unintended Metropolis is attributed to lack of planning and foresight, with unexpected growth due to migration and economic expansion. Life at the Margin in Cities looks at segregation, central ghetto formation and the middle class flight to the suburbs, with examples from the developing and the developed world. She reminds us not only about the importance of shelter, but also water, which is seen as the most important cause of struggle in the longer term future.

Under A Thousand Schools she does not shy away from the unpleasant aspects of city building: the tendency towards domination and polarisation, megalomaniac self-representation of dictators, violence, destitution and poverty. For her, the human city cannot survive without freedom, but needs to strive towards cooperation and greater justice. She asks whether such hope and optimism in the future is possible and mentions ‘sustainable development’. In her view capitalism, and later communism, rested on an ideology of infinite expansion of planetary resources, regardless of the ecological reality. She calls for cooperation to combat famine, stave off the nuclear threat, and preserve non-renewable resources - to find a better balance between material power and human purposes.

In The Technological Order she discusses economic constraints, which reflect the orthodoxy of that time. However she revisits absolute property rights and the liberal belief in market rationality. She reconsiders the role of the economy in providing easy access to remote parcels of land and the attribution of ‘unearned increments’ an issue that remains unresolved today. The separation of development from property rights is an important issue. She is a staunch believer in planning at all levels, but with better trained planners to counteract the ‘lottery spirit of speculation’. She evokes planned solutions from east and west, as well as the developing world. They include the countryside, discussed in A Green and Pleasant Land with ideas of rural communities to preserve heritage and deal with neglected fringe land.

She addresses macro-urban problems in Reshaping the Nation and discusses the shortcomings of social housing and community. She is a pioneer of polycentric mega-regions, thinking small, and formal subsidised citizen participation. People are the settlements makers, as well as the custodians of environmental protection. She also writes about integrated transport policy, values accessibility over mobility, calls for compact settlements, and seeks ecological rural development as an integral part of settlement strategies.

A large part of the book is dedicated to The Poor World’s Settlements. Throughout her career Ward combated poverty and fought for social justice. Focusing on formal settlements, she sees a point to the ‘site and services’ approach, but insists on people’s resourcefulness to provide their own shelter and work, with more international aid and state contributions for sanitation, infrastructure and urban services.

When she turns to Problems of Urban Management she seeks to empower citizens to manage their own affairs at the local level, given the lack of horizontal and vertical co-ordination in urban services, and remains critical of ‘masterplan unconnected with the people with its unpleasant undercurrent of “mastery” which can tear a city apart more easily than it can build a better one’.

Finally in The Universal City she proposes a new economic order, with intergovernmental management as the key to achieve a just and environmentally sustainable society. This treats people as a resource, not a problem. In the epilogue she optimistically calls for ‘loyalty to the planet itself which carries our earthly life and all the means of sustaining it’.

WARD’S RELEVANCE TODAY

Not surprisingly some contextual dimensions have changed forty years on. For one thing, the state as custodian of democracy is being challenged. Individualism and the virtual world seem to undermine social cohesion in the public realm. This does not mean that at least some self-determining communities are living in harmony with each other, even if they have not replaced the state as Ward had imagined. Most importantly, many concepts coined by Ward in this book have entered mainstream planning and are here to stay. They could also usefully be revisited to deal with current urban issues enshrined in unchallenged planning laws.

Judith Ryser

UPDATE 7
My Favourite Plan – Annabel Keegan

Redditch New Town Masterplan, Second Generation New Town, designated 1964

WHY I LIKE IT...
When I was invited to write this article, I thought long and hard about my favourite plan, and kept coming back to this one. Anyone reading this who knows anything about Redditch might think I have taken leave of my senses.

Redditch was designated a New Town in 1964 providing overspill accommodation for Birmingham. The New Town Masterplan was prepared by Hugh Wilson, who had extensive experience in Development Areas and as Chief Architect and Planner had been responsible for Cumbernauld New Town from 1956-62.

The vision for the masterplan was to blend the old with the new, with the aim of increasing the population of the town from 35,000 to 90,000 by 2000 (the population was actually 84,300 by mid-2011). The design was based on housing and industry clustered around ‘bead-centres’. The masterplan had an ambitious vision for transport, with Mr Wilson quoted in 1965 as keeping an open mind about what form the public transport should take: it could be buses, it might be a monorail, or something which had not yet been devised. Overall the concept proposed that although cars would be given access to all parts of the town, the pedestrian and public transport routes would be designed as the most direct and possibly the speediest method of moving about the town.

My parents moved to Redditch in 1969, my dad to take up a new job with Redditch Development Corporation as a Civil Engineer helping to deliver the masterplan, and my mum as a teacher at a brand new primary school. As a result, I have always loved this map. I grew up looking at it pinned to the wall in my dad’s office and have watched it being constructed; alas there is still no monorail.

WHAT TO LEARN FROM IT...
There are many lessons to learn from the masterplan, including how the Architects’ Department worked as three multi-disciplinary teams, each working under an assistant chief. Architecturally it has been a mixed success; some of the housing is typical of the era with now unfashionable Radburn style layouts. However, some of the public buildings delivered are successful. The Library in Market Place in the town centre is a hidden gem designed by the John Madin Group in 1974-5. The building is still well used, although the interior has been remodelled and modernised.

One element of the masterplan that has been particularly successful is the landscape strategy, prepared by Roy Winter as Chief Landscape Architect. Over three million trees were planted by the Development Corporation during the construction of the town and today the evidence of this is apparent in the mature landscape which surrounds the built form.

On the other hand, an element of the original masterplan that was less successful despite its lofty aspirations, is the vision for the transport system. Unfortunately, the masterplan was not fully realised, with areas of the town originally designated as public transport corridors remaining undeveloped. This has resulted in the car being the dominant mode of transport for getting about. However, scratch the surface of the movement network in the town and you will find a network of well-used footpaths, cyclepaths and bridleways.

Given the current requirement for the delivery of new housing I believe there are valuable lessons to be learned from looking back at our New Towns. Redditch has successfully accommodated its envisioned population growth and remains a popular place to live and work. Despite my mother’s initial reservations, my parents still live in the town 47 years later.
Safeguarding Quality via Permission in Principle

Matthew Carmona outlines a way of improving this broad-brush approach to planning approvals

The new Housing and Planning Act delivers a radical departure for British planning through the move to permitting development via a Permission in Principle (PiP), which relates to sites on a register of brownfield land or otherwise identified in the development plan. The new system potentially allows advanced approval to be given to significant housing projects up and down the country long before fundamental design, or a wide range of other material considerations, are ever considered. It raises a big question: how will place quality be guaranteed through this new system? Ultimately, it is only by more systematically delivering high-quality new homes and places that the vital support of local communities will be garnered for the new housing that the nation so clearly needs.

The former Minister of State for Housing and Planning, Brandon Lewis agreed with this when he argued last October at the Place Alliance BIG MEET 4 that ‘an increased focus on good quality design could help us to deliver more homes, at a quicker pace, which communities can feel proud of’.

In Clause 136 of the Act itself, there is provision for a new process of Technical details consent to be determined in accordance with PiP; PiP plus the technical details consent will represent the planning permission. More recently a Technical Consultation on the implementation of the changes proposed that design would be one of the matters for consideration at this later technical details stage. This, however, raises concerns:

- Design is not a detail, but a fundamental part of the process of assessing a planning application. Without proper consideration of the fundamental design considerations that relate to matters such as height, density, landscape, layout, connectivity and so forth, and what this means for how uses and spaces are distributed on a site, it is impossible to properly determine whether a proposal for development is suitable for a site or not.
- In particular it is very difficult to assess the quantum of development appropriate for a site and the right mix of uses (both issues that the legislation proposes should be decided at PiP stage), without having due regard to how this will actually be delivered. Will it, for example, be stacked up high in a single tower, laid out in streets, or perhaps distributed in a series of detached units?
- Communities will quite rightly be resistant to the giving of Permission in Principle to new development without having any sense of what that would mean on the ground and how it might affect the surrounding context and properties. What is currently proposed may actually increase rather than decrease local resistance to development.

THE COORDINATING CODE, A POSSIBLE SOLUTION

The three aims of a Permission in Principle are to:

- streamline the process of securing consent to develop
- increase certainty for developers and investors, and
- maintain a focus on quality outcomes.

It may be possible to combine the designations of PiP with the production of a simple Coordinating Code for each allocated site. Design codes are tools that establish the key urban design parameters for a site with a particular focus on making the place, but without the requirement for a detailed masterplan. Their use is encouraged in paragraph 59 of the National Planning Policy Framework (NPPF). Coordinating codes would be slimmed-down simple codes that establish on a single page the critical principles for making the place. As shown in the example (prepared by Place Alliance and Studio Real), they would:

1. Focus on the four place issues that are common to almost all sites: Community and land use, Landscape setting, Movement, and Built form/massing issues;
2. Contain minimal text that describes only these fundamental design parameters and fixes the expected design response; and
3. Illustrate the design concept in two dimensional terms through a simple plan graphic, so that the essential parameters of place are clear.

This would bring forward the proper consideration of fundamental (not detailed) design and place quality concerns in order to streamline the technical consents process later on. It would guarantee a level of quality to give certainty to both developers and local communities about what the development would entail, and would provide a basis against which to make ‘an estimate of the number of dwellings that the site would be likely to support’ (which the explanatory notes to the Housing and Planning Act suggested would be required information in the register of brownfield land). Finally it would help to avoid increased community opposition to proposals, as they would have a much better idea of what they are being asked to approve.

Coordinating codes would be simple, quick and easy to prepare (this example took two days) either by local authorities or developers promoting a particular site. Because they would be site-specific (not generic), the qualities they espouse could be subject to public engagement early in the development process (as proposed in the Technical Consultation), and would help to ensure a greater focus on securing early agreement about the need for high-quality new development. Finally they would help to make planning propositional once again, reviving the role of planning as a positive, confident and proactive force for change.

Matthew Carmona, Professor of Planning and Urban Design and Head of the Bartlett School of Planning, UCL
Streets have existed for millennia, and until the Industrial Revolution their design was largely a community affair. Cities, towns and neighbourhoods were laid out according to various principles based on: religion, health, economy, organisation, environment, and security. Streets were seen and designed as equal parts thoroughfare and location. They were meant to allow passage and be places of commerce, living and pausing. Some streets, such as alleys and cul-de-sacs, had no through function other than to provide local access.

**Brief History**

Chinese cities were organised according to *danwei*, such that there was little reason for people to travel beyond their own self-constrained work-unit world. Roman cities were largely organised along the dual *Cardo* (north-south) and *Decumanus* (east-west) axes. Anglo-Saxon cities typically consisted of a series of squares, while Latin cities preferred courtyards and walls. Islamic cities followed Shariah law which dictated a 'network of narrow winding streets consisting of public and private and semi-private streets and cul de sacs' (Saoud, 2001). ‘One essential characteristic of the traditional street pattern is the ability for people, particularly men, to meet in a series of unstructured encounters. Open areas are effectively a series of *majaalis* [meeting rooms] arranged in a hierarchical manner flowing from the privacy of the interior of the house to the larger public spaces’ (Lockerbie).

Streets have been designed and used for a number of purposes. They were built for ceremonies and parades. Wide streets were introduced to allow light and air into cramped quarters. Calle Amsterdam in Mexico City was designed as a horse racing track; now the central strip is a walkway and the outside used by vehicles. Harlem River Drive in New York City was once a horse race track, complete with stadium seating; now it is a highway.

For the most part, streets were historically the province of those on foot. While goods were wheeled in carts and the wealthy had horses and chariots, most people walked. Charles Dickens’ novels are filled with people perambulating – a ride in a horse-drawn cab was a rare treat. Streets were prime mercantile space as much business was done out of doors before the invention of electricity. ‘Congestion in the streets of Rome...led Julius Caesar to ban carts and chariots from the city between sunrise and sunset. The Forum of Pompeii could only be used by pedestrians and the street leading to the Forum ended as cul-de-sac roads’ (Hass-Klau, 1990). As late as 1911 wheeled traffic was forbidden between 11am and 9pm in downtown Buenos Aires. Streets were largely undemarcated, with few pavements. ‘Pavements protected pedestrians from wheeled traffic and were used as long ago as Roman times, but had been forgotten until the late 17th century. After the Great Fire of London in 1666, pavements were provided in all the newly constructed streets. In France and Germany pavements were not known until the middle of the 18th century, and then only in the ‘better’ streets. Haussmann and Alphand included pavements in all streets in Paris’ (Hass-Klau, 1990).

**Standardisation and Motorisation**

Streets began to change during the Industrial Revolution. Designs began to be standardised, and space was given over to mechanised transport: horse-drawn carts on rails, trolleys, bicycles, and cars. ‘By the end of the 19th century, attempts at controlling traffic by way of developing a street hierarchy were developed in the most sophisticated way by German engineers and planners’ (Hass-Klau, 1990). Reinhard Baumeister’s 1876 book *Stadterweiterungen in Technischer, Baupolizeilicher und Wirtschaftlicher Beziehung* (Town Extensions in their Technical, Surveying and Economic Relationship) was perhaps the first effort to codify street
design principles. It called for street widths based on motor vehicle traffic volume, a street hierarchy, different lanes or carriage- ways for fast and slow traffic, a standard ratio between carriageway, landscaping, and pavements, and ring roads.

As streets filled with higher-speed mechanised vehicles, efforts were made to simultaneously clear space and protect others street users. It was fairly easy to manage rail-based transport as long as other travelers could be kept off the rails. Harder were vehicles that could be steered, such as bicycles, cars, and trucks. Lanes were created for slower, faster, larger and smaller vehicles. Pedestrians began to be confined to the pavements or ‘sidewalks’.

In addition to street design, the street network was challenged. No longer was it sufficient to have a seemingly meander- ing network of lanes. ‘The French architect H Descamps designed his Cité moderne (published 1927 and 1928) as a new town consisting of a network of 100m wide streets which were laid out in blocks of 500-1500m distance’ (Hass-Klau, 1990). Le Corbusier’s new town of Chandigarh was organised on a 800m x 1200m grid.

A system called functional classifi- cation was put in place in order to codify and streamline the building of roads (and ultimately streets). Roads were ordered hierarchically, dichotomously and mono-mo- dally. They were viewed as vines, with cars as ants climbing up the arterial stalk onto a collector branch and ultimately a local leaf.

Policies on minimum standards were developed to guide road production. These were often based on tenuous grounds, even though they were listed as scientific. The classic example is the story of the dead dog. When attempting to determine how severe a vertical curve (aka: hill) could be, practitioners developed a standard called ‘stopping sight distance’. The idea was that a driver should be able to see a dead dog in the road and stop in time. No matter that the history of crashes with dead dogs was practically non-existent or that a crash with a moose or cow would be much more damaging (Hauer, 1999). To build a safe highway is an admi- rable goal, and there is nothing to suggest that highways built in the 20th century were not as safe as they could be; nevertheless, issues arose when the standards were trans- ferred to city streets.

RE-EMERGENCE OF STREET DESIGN

In the 1960s and 70s, communities and professionals began to question the way that streets were designed. A series of alternate approaches were developed, and the whole science of road building was questioned. The use of streets for people not driving emerged as a serious study. These approaches have continue to develop, and the following principles and practices could be called complete streets, context-sensitive solutions, traditional neighbourhood design, traffic calming, resilient streets, or sustain- able design:

1. Clear policies and compliance. There is so much decision-making in the design of a street, it is incumbent to have clear policies on the ultimate direction of the design. Compliance with those polices must be transparent.

2. Non-prescriptive street design guid- ance. There are millions of variations in streets, from size to use, to length, to look. It is impossible to dictate all the various scenarios. The key is to provide guidance for deciding critical issues.

3. Three physical properties of safety: separation, protection, and reduction.

   • If two objects are separated, either temporally or physically, there is little chance of conflict.

   • If two colliding objects are encased in padding (helmet, air bag), impact will be lessened.

   • If speed or weight is reduced, either absolutely or the differential thereof, the impact will be lessened.

4. Five measures of a street: throughput, access, context, economy, and priorities. Streets serve many functions and all must be accommodated.

5. Street network and street design over- lap. Streets and their intersections can never be viewed in a vacuum. They are part of a web of interaction which must be respected.

6. Size does not equal traffic. The size of a street is disassociated from the amount of traffic it can or should have. Narrow rights-of-way may process many vehicles, while wide boulevards may be prime loca- tions for flowers and playgrounds. A wider right-of-way is never justification for more traffic.

7. Parking is a proxy for driving. If one can- not park, one is less likely to drive. (TOD Standard, 2014)

CONCLUSIONS

Designing streets is inherently not sexy. It involves drainage, traffic control, passive observation, and political chutzpah. There is little room for swooping illustrations and feats of technical brilliance. The public must be dealt with. There are typically no ribbons for politicians to cut. starchitects need not apply. But, as we move away from the Foun- tainhead model, we find that a good street is a fundamental building block of a good city. It sets the stage for a higher quality of life, one which is safer, more productive, and longer lasting.

Michael King, architect and founder of TrafficCalmer.com

REFERENCES

John Lockerbie, An approach to under- standing islamic urban design, http:// catnaps.org/islamic/islaurb1.html, ac- cessed 2014.06.22
The TOD Standard, Institute for Transporta- tion and Development Policy, 2014
Influencing Inequalities in Urban Renewal

Rowan Mackay describes how a Bristol community’s high demands proved key to its success.

On a busy street in Bristol, passers-by pause to take stock of the latest piece of public service information to adorn the walls of the Carriageworks Site. This group of derelict buildings in the heart of the city’s thriving cultural quarter, Stokes Croft, have long served as a political backdrop to the area, symbolising the neglect of its buildings and communities, while providing a canvas for the community’s outspoken creativity. Such has been the level of public interest in the site that when numerous planning applications failed, a council-led scheme looked set to write a new future for the Carriageworks, as public pressure demanded nothing less than full involvement in the development process.

DERELICTION AND INEQUALITY

The area around the Carriageworks site has changed dramatically over the last 30 years. A victim of the deprivation that befell many city centres in the 1970s and early 1980s, Stokes Croft has since reinvented itself and become synonymous with post-industrial cities across Europe. But while the area’s increased popularity has seen creative industries-led urban revitalisation over the last decade - turning squats into cafés and office blocks into artist venues - the Carriageworks (a Grade II listed 19th century carriage terminal and two adjacent buildings, derelict since 1986), have remained inaccessible to a community desperate for space and eager to put buildings to good use.

Given the level of public frustration, in 2011 Bristol City Council’s (BCC) Property Department initiated proceedings to compulsorily purchase the site and lead a mixed-use redevelopment scheme. Over the last five years, the council-led scheme has put the opinions, needs and aspirations of most affected communities at the heart of decision-making, in a process that reads like a textbook for inclusive urban redevelopment.

Yet while the project’s success gains recognition, its achievements reveal the often insurmountable difficulties facing communities in similar situations. The extraordinary circumstances and efforts made by all parties show how difficult it is for communities to play a meaningful role in the growth of cities, and highlight the ineffectiveness of policies and mechanisms aimed at enabling that. It took a national campaign fronted by comedian Russell Brand to secure the interests and avoid the eviction of 93 families on London’s New Era Estate in 2014; likewise the case of the Carriageworks is exceptional. But just as the trade-off between local interests and financial viability becomes a defining narrative of change, the Carriageworks case helps to hold a mirror up to the wider process, to understand the limitations and inequalities of current policies and practices, and to bring the question of who determines the future of cities to the forefront of public debate.

PUBLIC ACTIVISM

The degree to which the communities of Stokes Croft have been able to participate can be attributed to the formation, resourcing and continued perseverance of the Carriageworks Action Group (CAG). The need for an inclusive and transparent process was made very clear when in April 2011, riots erupted in Stokes Croft. Protestting the closing of one of the area’s popular squats-turned-arts venues to make way for a Tesco Express store, a member of a local activist group remarked “there is an extraordinary refusal to accept injustice in this community”. So for those at BCC setting out a strategy for the Carriageworks, the acute sense of collective ownership and public activism made placing the community at the heart of the process essential. In response, CAG, supported by BCC, has served as a conduit for the area’s many outspoken voices, with the capacity to engage professionally and build relationships with major stakeholders.

FIVE YEARS OF CHANGE

In the five years since CAG’s founding, the project has seen BCC’s development partner Knightstone Housing Association withdraw, the suspension of the Compulsory Purchase Order process, and further consultations on plans from a second developer, Fifth Capital, which are currently in the final stages of planning before work can begin on site. Tracing the history of the project over the last five years, with generous help from CAG members Lori Streich and Julian Mellor, many inclusive methods and practices emerge. Two examples of how local interests have remained central to the site’s future are: CAG’s acquisition and scrutiny of Fifth Capital’s viability assessment; and, BCC’s support for a community-led management plan for the completed development (through the Stol6 agreement). In drawing out the bigger lessons from the Carriageworks’ complex history, three particular events are key.

The first was in September 2011 when, shortly after the creation of CAG and with funding from the Homes and Communities Agency (HCA), BCC commissioned the production of the Carriageworks Community Vision. Undertaking six months of comprehensive and wide-reaching public consultations, CAG were easily able to mobilise public involvement, with professional support from two local built environment specialists funded by BCC. The document details the collective needs, opinions and aspirations of the communities. The Community Vision has since been used by CAG and BCC as the main point of reference for stakeholder negotiations and to inform Council decisions. Establishing the professional legitimacy of the local community set a clear agenda from the start. With the capacity to communicate technically and knowledgeably, CAG have been able to form trusting relationships with major stakeholders and in doing so, to negotiate local interests on an equal footing.

Secondly, in March 2015, after the withdrawal of BCC’s preferred developer and the suspension of the CPO process, the Council’s
Planning Committee deferred the decision on Fifth Capital’s planning application. Stipulating the need for greater collaboration between Fifth Capital, CAG and BCC was testament to CAG’s emergence as an effective pressure group and to the efforts of its volunteers. Being in the rare position of understanding both the community’s needs and the realities of the planning and development process, CAG have fulfilled a role missing from very many urban regeneration projects: ensuring public transparency and awareness of the all-too-often opaque aspects of development, while providing an informed and legitimate platform for local voices to be heard.

The third event highlights the defining challenge of regeneration projects today, that of finding a successful balance between local interests and the financial reality of inner city development, not to mention those that come with a derelict Grade II listed site like the Carriageworks. Such challenges are not new, and property developers are held accountable for inadequate regeneration responses to local needs. But the Catch 22 decision faced by cities between the continued neglect of neighbourhoods or the proliferation of inequitable development, has its roots in wider issues than developers’ balance sheets. To point the finger solely at developers when issues such as a lack of affordable housing arise, as has been the case here, can be short-sighted. In the case of the developer Fifth Capital, after a rocky start, the impressive efforts made by director Marc Pennick to understand the situation in Stokes Croft have won praise from a demanding crowd. Ultimately, his openness to working with CAG and to consult on and review the original proposals (about which BCC received some 1,400 objections) resulted in permission being granted in October 2015 with support from local communities. Just two objections were received by BCC.

PUBLIC CONSULTATION QUALITY

The collaborative efforts made by the Council, community and developer in delivering an inclusive redevelopment process, and ensuring a future for a contested site deserves recognition. Yet while the case offers many lessons, given Stokes Croft’s long history of public activism and CAG’s refusal to accept anything less than full participation, it is hard to see how a lesser approach could have been possible. Such an acute sense of collective ownership and level of activism are rare, and the many guises of consultation aimed at empowering communities and devolving decision-making in planning are often ill-placed or lack the resourcing to make them effective. A landmark Supreme Court ruling in 2014 that public consultations must, by definition, offer arguably different options for public discussion, provides an important precedent for challenging tokenistic engagement initiatives (UKSC, 2014). The failure of the Localism Act to serve the most vulnerable communities, the Housing Bill further restricting councils’ ability to respond to local need, and the only mechanism for communities to negotiate planning proposals coming at the end of the planning process (in s106 agreements) are just a few of the barriers to inclusive urban growth.

EQUALITY

In attempts to mitigate the inequalities of the property market, efforts to replace VAT with Land Value Tax (LVT) and a greater role for housing associations in the private rented sector have each gained momentum recently. Taxing land based on its location through LVT would incentivise inner city development by taxing brownfield or derelict sites the same as an adjacent profit-making development, thus penalising the wilful dereliction of neighbourhoods in anticipation of increasing land values. The emergence of an ethical private rented sector is one consequence of the punitive policies levelled at housing associations in recent years, and a good example is Bristol City Council’s partnership with Acorn HA in 2015 and the adoption of a city-wide Ethical Lettings Charter.

The story from Bristol shows that in the pursuit of inclusive and equitable change for our cities, the greatest innovations are needed locally. Bristol City Council’s actions in enabling meaningful community involvement in the Carriageworks redevelopment should not be understated. These were:

- facilitating the Community Vision
- building the capacity of local representatives on equal terms with major stakeholders, and
- pursuing conflict resolution through closer partnership with local authorities.

BCC have shown the potential of a wilful and, crucially, well-resourced local authority. Simply strengthening local authorities’ ability to intervene, however, would not bring about the cultural shift in stakeholder collaboration that is needed across both the private and public sectors. In an age of austerity, funding like that received by Bristol cannot be counted upon, and mean that authorities need to think more progressively about how to enable participation, beyond traditional forms of service provision. One city where this approach is being explored is Sheffield, in a partnership between Sheffield School of Architecture and the City Council. By linking the ambitions of a socially engaged university with a resource-strapped authority, the Live Works initiative is developing a model of regeneration through co-production, exploring how mutual interests can foster urban development projects in close partnership with local stakeholders.

While CAG and the communities of Stokes Croft wait eagerly to put the Carriageworks to good use, the final lesson is that in ensuring our right to the city, whether as a council or company, it is our responsibility to demand more.

Rowan Mackay, urban designer and researcher, based in Bristol.

REFERENCE

UKSC (2014), R [on the application of Moseley (in substitution of Stirling Deceased)] (AP) (Appellant) v London Borough of Haringey (Respondent), UKSC, London
The relationship between food and the city is fascinating. As urban designers we like nothing more than to illustrate a proposal with a vibrant street market or a row of suitably active restaurants and cafes.

As places increasingly urbanise, the demand for food grows. Over the last 50 years the points of food production and consumption have become increasingly further apart, and the link between the farm and the plate is at times imperceptible. In the 1940s the Dig for Victory campaign of the Second World War resulted in there being 1,400,000 allotments in the UK. Today there are scarcely 300,000. Growing space, whether it is allotments, back gardens or agricultural fields, has been under increasing pressure for development, and in many cases has been a soft target.

Feeding the UK’s burgeoning urban populations is no mean feat. Around 95 per cent of fruit and 50 per cent of vegetables consumed in the UK are imported. The nature of food distribution into the city has changed hugely over the last decades, with major distribution centres positioned around the city and fleets of refrigerated lorries and delivery vans teeming out from these hubs. As one digs deeper into the issue of food, one cannot help but ask if this is an aspect where the accepted conviction that higher density development is more sustainable comes unstuck. However, for those that are taking on the challenge of designing food back into cities, there are a myriad of opportunities, many that are borne out of higher and higher density forms.

This edition of Urban Design dives into these opportunities, exploring the changing relationship of the city with food. It looks into some of the trends that have emerged over the last decade to respond to the challenge, as well as looking into the future as to where we, as designers, might need to head.

Susan Parham provides the starting point, charting both the city’s relationship with food and the growing recognition of food as a design factor over the last twenty years. Elizabeth Reynolds then provides an overview of the spectrum of ‘edible urbanism’ ideas being developed and how they are being applied in cities such as London, from underground farms beneath high streets to apps to identify potential rooftop growing space.

The next two articles look at two theories in more detail. In the first Bohn and Viljoen outline the evolution of their concept for continuous productive urban landscapes and the lessons learned from applications across Europe. Oscar Rodriguez then focuses on rooftop farming and the enormous potential for London to embrace this type of food production. He illustrates the opportunities in both new build and refurbishment schemes.

After this, three articles review different types of site-based intervention. To start are Olusola Olufemi’s views on the more traditional farm and how this typology is evolving at the urban-rural fringe, to respond to both food demands and social needs. Next, Jayne Bradley Ghosh provides a fascinating insight based on her pioneering experience in Birmingham, into what it’s like to set up a community garden from scratch.

Finally, Helen Grimshaw and Jie Lu introduce the Allotment of the Future, a recent installation in Manchester of futuristic but practical solutions for domestic food production. This issue concludes on a futuristic note with CJ Lim setting out his idea for a Food Parliament, a fictional look at how the governance of London could be structured around food, raising some very real and pertinent questions about how designers and planners might give greater priority to food.

So, please tuck in...
When I started theorising about food and city design in the early 1990s, I argued that how food is grown, transported, bought, cooked, eaten, cleaned up and disposed of has significant effects on creating a sustainable, resilient and convivial future for urban space. I suggested that urban designers needed to recognise and reflect this in their practice. One of my work colleagues came up to me after a lecture I’d given on ‘gastronomic strategies for Australian cities’, where I made specific suggestions about how we might focus on food-centred design, and said ‘It is a joke, isn’t it?’

With the benefit of hindsight I can see his point. No-one practising strategic planning and design nor almost any planning and urban design theory I found at the time (with Christopher Alexander et al, Bernard Rudofsky and William H Whyte perhaps being honourable exceptions), seemed to be making design connections between the food system and city form. Where it was acknowledged that food markets and cafes give local colour and vibrancy, food was to be added in once the important place design aspects, like parking, had been done. Planning for food production, retailing and consumption was mostly about accommodating bigger and bigger supermarkets, moving wholesale food markets to more ‘efficient’ fringe locations, treating retail food markets as leftover forms in irredeemable decline, situating urban agriculture as a romanticised hippie lifestyle adjunct, and so on. Food was not understood to have any profound relationship to place-making in cities, whether in central areas or burgeoning suburban and post-urban regions.

How things have changed! Food is now increasingly recognised among those working in built environment professions and academia to be a critical topic in urban design and urbanism, at the intersections of social science, planning, architecture and design. Food, we now tend to agree, matters enormously in making convivial and sustainable places. A fair bit of scholarship, professional practice and policy work has been undertaken to explore the myriad connections between food and urban design, and to try to reflect those insights in policy and place-making.

Strangely, the most ‘modern’ places and countries have got things most wrong. Those experiencing a more traditional food system – regionalised, food specific, and culturally connected to gastronomy – have better food and make places many of us want to visit. But we have also seen a kind of ‘group think’ which says that while we can see many places like this in both the global north and south, such spatial practices are symptomatic of a nostalgic past, which could not expect to influence contemporary, go-ahead city form.
Food geographers and sociologists have argued that ‘you are where you eat’, and to grapple with the spatiality of food. Some have explored ideas of edible urbanism through design, landscape and architecturally based approaches which began to emerge early in the 21st century. These include shaping cities as productive spaces for food, identifying places that represent ‘convivial ecologies’, and seeking ways to reshape urban form toward more food-centred ends through continuous productive urban landscapes (see Andre Viljoen’s article). There are now many food policy councils, food strategies and design guides which explicitly focus on food in particular places.

What seems to have stayed a constant is the central underpinning argument I made nearly 25 years ago about food and place design:

‘Sharing food together allows for a daily physical and social re-creation of the self that is also fundamental to the sense of human connection to others. The physical design of cities can determine the richness of experiences of food and eating; working for or against the expression of conviviality by the way space is shaped and urban development approached. Opportunities for conviviality in the city rely upon an extended set of “gastronomic” possibilities. And these possibilities can be widely conceived in city planning and design. They relate as much to kitchen layout as to market gardening, to the psychology of the café as to policy for metropolitan growth’ (Parham, 1992).

The urban conditions about which I wrote have shifted since then, but much of that change has been in terms of extrapolating trends already becoming apparent then, and which are now that much more substantial and severe globally. Dominant tendencies in urbanisation were already undercutting opportunities for both conviviality and sustainability. The drift to cities was well underway, cities themselves were morphing into massive conurbations, dense central cities were being undermined, car-based sprawl was increasingly common, and rural-urban edges were finding their food systems under threat. A meta-level trend was and remains the way that the huge dominance of car-based urbanism, as a place-shaping urban design reality, has squeezed out food space and coarsened the urban grain to food and the planet’s detriment.

RANGE OF SCALES
In Food and Urbanism (2015), I explored all of that at a range of scales from the table to the productive region. In a sense this was also a design history of urban form in food terms since the Industrial Revolution; moving from food in the traditional city, through the foodscapes of early suburban expansion, and onto food’s design expressions in the huge post war development of post-suburban space, and 21st century urban transformations into megalopolis. It showed that the effects of modernism on food space design have been exceptionally profound and problematic, and they are still seriously underestimated in relation to their negative impact on both sustainability and conviviality in the future.

Food and Urbanism demonstrated that from the kitchen, dining room, garden, street and shop, food market, townscape, productive green space, suburb, urban edge, conurbation, city region and countryside, the design of food spaces has resulted from a series of place-making decisions that have not necessarily recognised, acknowledged or come to terms with their food implications. It asserted the importance of treating food space design through ‘nested scales’ of urbanism, in order to address what are connected design issues along the food chain with huge effects on individual quality of life and the health of cities.

I dealt with the urban design of one of these foodscape scales in an earlier book Market Place (2012) which reflected on primary field work undertaken in London over 2005-2008. In that design and social science-based research I explored the rise of what I termed ‘food quarters’ emerging from the ashes of a series of moribund wholesale and retail food markets, at Borough, Broadway and Exmouth Markets.

Today these places are obvious London food destinations, but this transmogrification was at an earlier, far less fully-realised form when I was doing fieldwork there. I argued from my urban design analysis, interview and observational data that these resurgent market spaces and their connected, surrounding urban quarters were experiencing a kind of hybrid form of food-centred spatial development. I saw this as an urban design-centred transformation in which traditional urban form (including compact, accessible streets, public spaces that made excellent outdoor rooms, within fine grained, mixed use areas) both underpinned and was intertwined with new forms of local sociability.

The food-centred design transformation of such quarters also had much wider spatial design implications, supporting sustainable food related supply chains back towards production as well as forwards towards personal consumption. The result was a highly paradoxical one in which these areas experienced both gentrification and the creation of design related convivial ecologies.

GENTRIFICATION AND CONVIVIALITY
I am able to keep in touch with Broadway Market’s further development along these paradoxical lines through the Evening Standard’s Property pages, which offer the interested reader a regular (if unintended) update on the course of gentrification and conviviality relating to food space. The edition on 15 June 2016 for example revealed fascinating snippets from the estate agents who have moved in to capitalise on the revival of London’s market areas. Ruth Bloomfield explained that ‘over the last five or six years Broadway Market in Hackney has also been transformed, from a few tired
stalls to a hipster haven’ (Bloomfield, *Evening Standard Homes and Property*, June 15, p.1c). A local estate agent was quoted saying that prices in the area had increased by 8 or 9 per cent above those in the rest of the area ‘thanks to the high-profile market... it’s not just the market, it’s all the other things it supports – the boutique shops, the cafés and pubs’.

It may be obvious to urban designers now, but what cannot be underplayed is how important food is to our increasingly urban future, and how much urban design can do to help make that a more sustainable and convivial prospect.

**URBAN DESIGN’S ROLE**

Many food system writers situate our current global food situation (broadly) as a fight between an insecurity-producing mainstream food system and so-called Alternative Food Networks. These seek to challenge assumptions that soil, water and space-depleting approaches are needed to feed the world’s population. This is an urban fight and an urban design one. In a context of rapid urban expansion allied to increasing inequality played out through food insecurity, food poverty and obesogeny, where does urban design come in? I would like to think that urban designers could act as a vanguard – asserting the need for human-scaled, locally sensitive, place-dependent design approaches in the face of structural forces of crude technological modernism.

One of the most interesting areas that designers will need to think about relates to the food-centred retrofitting of the huge amount of dysfunctional space created through poor urbanism. Existing urban spaces developed from the post Second World War era right up to today seem especially rich in opportunities for improvement because we have departed from the rules of urban design that Roger Trancik has spelled out so beautifully.

There are a range of approaches to design-based food retrofitting now offered by designers from different perspectives. Andrés Duany’s 2011 proposals for food-led retrofitting Agrarian Urbanism might be considered a subset of retrofitting urban design within a sprawl repair paradigm. More landscape architecture focused methods like those of Andre Viljoen and his colleagues of continuous productive urban landscapes mentioned earlier fit here too.

**NEW TOWNS**

Recently I published the results of primary research on a food retrofitting theme in a New Town context in the United Kingdom (see *Shrinking Cities and Food: Future Directions for the European Shrinking City*, 95, 2016). The New Town in which this fieldwork was undertaken is shrinking in some ways while growing in others: it was designed along post war place-shaping lines, suffered from post-industrial decline and became largely a business park employment centre for incoming workers, while also continuing to house those stranded by earlier de-industrialisation. Using visually-based urban design scenarios among other methods, the work explored how food-centred urban design could help to retrofit a series of spaces along the food chain from the urban edge to the town centre, each currently judged dysfunctional in a number of ways connected to their design quality.

Retrofitted spaces proposed included food ways along over-engineered road systems, peri-urban orchards, revived midblock allotments, business park located vegetable and community gardens, and revived central markets and shopping streets. I argued that such retrofitting work could support the food resilience and sustainability of New Towns (and similarly configured places). In my view this is one of many design settings that food-centred urban design work can and should be exploring as part of the art of town making.

In closing, it is clear that urban design and food are intimately interconnected. The more aware that designers become of the food dimensions of place, the more likely we are to make both convivial and sustainable living environments – something we should all be aiming to do to address the need for living space of high and resilient quality.

Susan Parham, Head of Urbanism, Centre for Sustainable Communities, University of Hertfordshire and Academic Director of the new International Garden Cities Institute, Letchworth

**REFERENCES**


As Kevin Archer explains in his book *The City: the Basics*, ‘the limited territorial extent of the city precludes the possibility of feeding all from within’ (Archer 2013, p.2). However what if cities aimed to be as productive, resourceful and self-reliant as their geography allowed? Whilst increasingly sophisticated consumers might demand exotic varieties of food to be traded across the four corners of earth, many cities could benefit from producing more food within their footprint. So, how might a commercial farming business be established in London to offset one city’s rather large appetite?

**LONDON’S FOOD FOOTPRINT**

Over 50 per cent of the United Kingdom’s fresh produce is sourced internationally, contributing significantly to the ecological footprint of Greater London, being approximately 293 times larger than its actual land area. The ecological footprint of a city reflects the food, transport, energy, water, land, materials and waste consumed by a city, compared with the amount of the same resources produced within that city’s geographical area. Aside from the significant ecological impacts of current consumption, this context presents risks to London’s food security and leaves consumers with fruit and vegetables that are potentially less nutritious as a result of the time needed to pick, process, store and transport.

In 2004 Greater London contained only 366 hectares of horticultural land, a 77 per cent decrease since 1970. In parallel to
The organic E5 Bakehouse in an old railway arch, London

Using LED technology to grow vegetables underground in Clapham, London

3 The organic E5 Bakehouse in an old railway arch, London
4 Using LED technology to grow vegetables underground in Clapham, London

the reduction in horticultural space within London, average farm sizes elsewhere in the UK have increased, offering cheaper prices through economies of scale. Larger farm sizes coupled with cheap imported produce and the scale of distribution offered by many major food retailers and supermarkets is therefore a formidable combination with which to compete.

Although London is a dense, historic city there are plenty of opportunities to use land more efficiently. Indeed a 2008 report titled Living Roofs and Walls estimated that in the areas of Cannon Street, Oxford Street, Tottenham Court Road and Canary Wharf alone, over 74 hectares of usable roof space could be available (GLA 2008). Clearly many roofs are too small, or restricted by land tenure, design and ownership constraints to realistically be used for roof farms. However, taking a considered approach, a significant amount of ‘land’ could potentially be unlocked. In fact, using just 30 per cent of the 74 ha of roof space identified at a 60 per cent coverage rate could yield approximately 2,000 tons of produce and £7 million revenue per annum.

**Urban Farming Pioneers**

Although London produces a relatively small amount of the food that it consumes, there are a few farming pioneers in the community and commercial sectors. The Spitalfields City Farm provides a space for school children to learn more about farming and has been operating through volunteer time and the sale of fresh produce for almost 40 years. At Kings Cross Skip Garden, a young volunteer group grows fresh produce in disused skip bins. The vegetables are then sold to local cafes and restaurants, helping volunteers learn more about sustainability, the construction industry, techniques for food growing, marketing and sales. In summer 2016 Farmopolis will open on the Greenwich Peninsula: the floating community garden will be landscaped using plants left over from the Chelsea Flower Show. Farmopolis is intended to evolve to include food incubators, hydroponic farming, green recreational areas, orchards, farm-to-table restaurants, and event spaces.

Turning to commercial food growing ventures, the FARM Shop in Dalston, accommodates an aquaponic micro fish farm, indoor hydroponics, a chicken coop and poly-tunnel greenhouses. Grow Up Farms also recently began aquaponic and hydroponic farming from a 6,000sqft industrial warehouse in Beckton, where they hope to produce more than 20,000kg of sustainable salads and herbs and 4,000kg of fish each year. The Growing Underground Farm in Clapham also utilises hydroponic farming techniques to grow fresh micro greens and salad, but in a more unusual location: 33m below street level in a former air-raid shelter. Using LED technology, crops can be grown year-round in a pesticide-free environment with an even temperature and minimal water. In 2014 the Japanese technology company Toshiba established a trial clean factory for food, where in a former semi-conductor factory, they plan to grow three million heads of lettuce every year without using sunlight, soil or pesticides. Similar technology and modular growing systems are also being promoted by US company Growtainer in partnership with technology company Philips.

In addition to growing fresh produce, there is also an urban trend towards small scale, high quality food processing. The London Honey Company, Crate Brewery, Square Mile coffee roasters, Clean Bean tofu, Hansen-Lydersen wood smokers, Sipsmith gin distillery and Square Root Soda are just a few of the specialist food businesses helping to make London a more productive city.

**How Food Could Reshape Our Cities**

In New York the city skyline is becoming greener through the installation of rooftop farms, and although London’s historic building fabric is less able to accommodate this scale of green development, there are other ways in which urban landscapes could be improved through food production. If undertaken on a large enough scale, commercial, community and home farming could reduce the number of delivery vehicles on city streets. Public landscaping could also include more fruit trees and edible plant species. Electronically controlled LED lighting and watering systems could also convert previously disused spaces into places for growing a range of fresh produce. The vertical farming techniques promoted
The CPUL concept: green corridors provide a continuous network of productive open space, and routes for pedestrians and cyclists shortens the supply chain and delivers fresher food.

CONCLUSION
Urban planners and designers need to identify strategic opportunities to encourage the production of food in cities. Be it small scale community-driven initiatives or high-tech commercial farms, urban agriculture has an important role to play in improving the sustainability of cities and the health of residents.

Elizabeth Reynolds, Director, Urban

REFERENCES

Undeniably, during the last twenty or so years, urban agriculture has become an increasingly common feature of many urban areas in the global north and – responding to social, environmental and economic concerns – has long been practised in the global south. Urban agriculture is now understood as a movement and as a land use typology. It was defined in 1996 and has been widely researched ever since.

Irrespective of definitions, it is probably the stark contrast between the words urban and agriculture – picture them both individually – that triggered the imagination and creativity of those who used the term and sent it out into the world with a question mark and an exclamation mark. Above all, it expresses the duality of a spatial observation – the adjacency and immediacy of the urban and the field (agri) – and a direct action – to grow (culture).

Over the last ten years, design research and academic explorations of urban agriculture and its spatial effects have significantly increased in the global north. From an architectural and urban design point of view, concepts such as Agrarian Urbanism (Waldheim 2010) and Transition Towns (Hopkins 2008), as well as our ‘continuous productive urban

The Productive City: Urban Agriculture on the map
Katrin Bohn and André Viljoen call for the integration of urban food production

The CPUL concept: green corridors provide a continuous network of productive open space, and routes for pedestrians and cyclists...
landscape’ (CPUL) or CPUL City work, are examples of thinking holistically about the origin, current practice and future of spatially integrated urban food production.

**THE CPUL CITY CONCEPT**

Our work proposes design strategies and prototypes that can make urban space more productive and more desirable for its citizens. We start from our experience of the dense European or Western urban area and attempt to enrich the qualities of urban life whilst, at the same time, reducing the negative environmental impact of current urban food systems. We have developed the CPUL City concept to address this.

CPUL City describes an urban future based on the planned and designed introduction of what we call continuous productive urban landscape – landscapes defined by urban agriculture – into existing and emerging cities. CPUL City has fundamental physical and social implications. It follows a systematic approach and proposes that urban agriculture can contribute to more sustainable and resilient food systems, while also adding beneficially to the spatial quality of the urban realm. It is an environmental design strategy, and provides a strategic framework for the theoretical and practical exploration of ways to implement such landscapes within contemporary urban design.

Central to the concept is the creation of open urban space networks providing a coherent, designed multifunctional productive landscape that complements and supports the built environment. CPUL’s physical manifestation will fundamentally change the urban landscape and implies an equally fundamental change to the way that societies and individuals experience, value and interact with it. Within the CPUL City concept, urban agriculture refers to fruit and vegetable production, as this provides the highest yields per square metre of urban ground. The key features of CPUL are outdoor spaces for food growing, leisure, movement and commerce shared by people, natural habitats, non-vehicular circulation routes and ecological corridors. Its network connects existing open urban spaces, maintaining and, in some cases, modifying their current uses.

The CPUL City concept recognises that each city and each site will present a unique set of conditions and competing pressures informing the final shape and extent of its productive landscapes. It envisages a mixed economy of growers practising urban agriculture: projects for and by the community, small-scale and large-scale, commercial and communal, low-tech and hi-tech. Broadly speaking, commercial-scale production will be necessary if urban agriculture is to have a quantifiable impact on food production, whilst personalised production is very significant from a social and behavioural change perspective. Yet urban agriculture will not meet all of a city’s food needs, and any in-depth review of urban food systems must consider the relationships between a city, its local region and beyond.

So, the spaces envisaged in a productive city such as CPUL City, are not only food-yield-productive, but their everyday use is also guided to be healthy, fair, economically stable and convivial. These spaces are green and open, and they flow out and into the countryside, and back from there, as do wildlife, air, people, and above all food.

**THE GROWING PRACTICE OF URBAN AGRICULTURE**

It is neither possible nor desirable to feed a city solely through urban agriculture. However, coordinated and well-managed relationships between urban, rural and international agriculture can lead to an environmentally optimal and equitable urban food system. In our 2005 book Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities, we argued for a mix: a
mix of open urban space uses around urban agriculture, as well as a mix of foods from various origins for the urban consumer. There, we presented estimates for potential self-sufficiency in fruit and vegetables of about 30 per cent. Subsequently, similar figures have been calculated by other planners and researchers such as Michael Sorkin and Mikey Tomkins, and architect Joe Lobko who presented findings for a housing development at the 2011 Ontario Association of Architects conference in Toronto.

Urban agriculture brings many advantages to a city, social, health, environmental, local, educational, and can be practised not only for food production, but to achieve these wider outcomes. However, international experience shows that more and more projects are being set up explicitly to produce food in larger quantities and that existing practice is being optimised. The increasing emergence of projects that are demonstrably successful enterprises – traditionally economic or newer social – provides proof of the acceptance of productive urban landscapes as a desired and planned urban land use. It also offers a reality check of the ideas.

Contemporary and new forms of urban agriculture in the north have, in the main, originated in North America and, looking eastwards, spread from there since the early 2000s to the UK and Europe. The establishment of economically viable schemes for various types of urban agriculture during the past five, or even ten to fifteen years, is new on both sides of the Atlantic, complementing older, more leisure-based and communal practices, such as the European allotments or the North American community gardens.

In the UK, the Capital Growth project gave the London community gardening scene an important boost in 2009 with the goal of creating 2,012 new projects in the three years to the 2012 Olympics. Several British cities, such as Brighton (Brighton and Hove Food Partnership 2012), Bristol (Bristol Food Network 2010), Leeds (Leeds Permaculture Network n.d.) or London (Sustain n.d.) have developed strong dedicated food-growing networks and programmes since at least 1999 (which is when Sustain was founded). The first farmers’ market was set up in Bath in 1997, followed by the nationwide establishment of the National Association of Farmers’ Markets in 1998, and policy interest is evident in several places, for example in London with the Cultivating the Capital report (London Assembly 2010) or in Brighton and Hove where the local council requires a statement about food growing for every new-built planning application.

Taking all of these facts as signs of a public willingness to address urban food systems, the question now is how best to support the development of urban agriculture and productive urban landscapes, so that they can reach both their full food-growing potential, and move beyond niche activism, to become part of integrated urban food systems, consequently gaining spatial significance within the urban fabric.

Four main challenges can be identified:
1. In order to coherently embed urban agriculture spatially into urban areas and local contexts, both temporarily and permanently, research- and planning-led urban design and architectural concepts are needed. (Keyword: productive urban landscape).
2. Despite the great accumulated knowledge about and the huge social capital invested in urban agriculture, clear applicable guidance and best practice dissemination are essential to enable and augment the capacity of urban food growers, their projects and their sites. (Keyword: toolkit/ actions).
3. Recognised regulations or agreements with public decision-makers (e.g. planning, trading, land rights) and other food-related entities (e.g. rural, markets, accreditation bodies) are needed to support and safeguard urban agriculture practice and sites. (Keyword: food policy).
4. To become widespread and maximise its associated social, public health
and environmental benefits, urban agriculture needs to be integrated into mainstream food production and procurement systems. (Keyword: urban food systems).

These four challenges need to be developed in parallel within a city’s particular local, regional and international urban food systems.

**DESIGNING URBAN FOOD SYSTEMS**

Urban agriculture is always part of something. As a land use type, it may be part of more strategic concepts, such as CPUL City or other development concepts adopted by a municipality. As a food-growing activity by individuals or groups, it is part of a network of processes aiming to sustain urban life, either directly by the produce grown, or by the commercial exchanges it generates. Additionally, supportive policy frameworks – food policies – generally do not target productive urban landscapes or urban agriculture alone, but wider and often very complex networks of food provision supplying city dwellers, i.e. urban food systems.

In the 1990s, researchers in the USA laid the foundations for an understanding of urban food systems that is still used and referred to today. Kenneth Dahlberg’s work, for example, aimed at developing food-related policy as a basis to devise specific strategies for food planning in particular urban contexts, emphasising the need for understanding food systems as local systems.

Around the same time, Kameshwari Pothukuchi and Jerome Kaufman began urging for food systems to be placed on the urban agenda in order to fully address the quality of life in urban localities. Both researchers later wrote the now seminal 2007 APA Policy Guide on Food Planning which crosses the divide between food systems planning and urban spatial design. We see urban agriculture and productive urban landscapes as ways to contribute to this vision of a more sustainable and equitable provision of food for cities.

Urban food systems can be broken down into smaller components such as household or neighbourhood food systems, which make it easier to tackle more local challenges, provided that the bigger picture stays in focus. Urban agriculture and productive urban landscapes are, or should be part of both scales of urban food systems.

However, whilst historic models of urban agriculture evolved out of necessity, in the contemporary city we now have a window of opportunity to plan coherent strategies for its introduction. As urban agriculture, in all its different forms appears and grows within cities, the next critical step is to get it written into planning documents and legislation as a proactive way of improving current urban food systems and providing value beyond direct financial return. In doing so, a rich public discourse can develop, as seen in New York, Berlin or London, articulating urban agriculture’s many benefits from environmental motivation to ornament, to behaviour change, and challenging current measures of success. The other action required, and here architects, planners and designers have a lot to do, is to knowingly bring forth the design and development of processes, landscapes, buildings and infrastructure which new urban farmers and the wider urban population need and desire.

Katrin Bohn, senior lecturer, and Professor André Viljoen, at University of Brighton, co-founders of architectural practice and environmental consultancy Bohn & Viljoen Architects

Towards an Indigenous, Sunlit, Rooftop Food Production

Oscar Rodriguez looks at London’s capacity to change

Food prices are expected to rise after the UK’s Brexit vote. We are 40 per cent reliant on EU fruit and vegetable imports, and critically reliant on labour, research funding, farmer subsidies and environmental protection legislation.

In 2014, we imported £8.7bn and exported £0.9bn-worth of fruit and vegetables globally (mostly with Europe), amounting to a trade deficit of £7.8bn. Concerns over quality, chemical content and farm-working conditions have led to increasing unease with cheap imports. If the pound’s recent devaluation marks a new normal, the price of foreign produce will rise and spark a renewed cost of living panic and a politically-motivated oil price.
Our attitudes towards our food and health remain woefully dysfunctional. 30 per cent of adults aged 19-64 years and 10 per cent of boys and 7 per cent of girls aged 11-18 years meet the 5-a-day fruit and vegetable recommendation. Obesity continues to rise with the WHO projecting 74 per cent of men and 64 per cent of women in UK to be overweight by 2030. Food waste levels remain an unwavering embarrassment. If the cost of healthier eating rise alongside a continued lack of action on consumer behaviour, projections like these may even be conservative.

A RADICAL RETHINK AND ROOFTOP FARMING

One silver lining is that these conditions may incentivise a radical rethink of our food system. Fruit and vegetables are at the centre of this; we should be eating more of them, they are the most efficient conversion of solar to chemical energy and, if adequately designed, we can happily live next to them as they grow. For these reasons, fruit and veg (F+V) could have an architectural role in our cities, in urban farming and its subsets. There is a wide range of applications and modes, from allotments and community gardens to hyper-insulated plant factories and architecturally-acrobatic vertical farm-scarpers.

The mode of particular interest to this author is that of the rooftop greenhouse farm and its variants. Their attraction lies in their challenge to the thinking that roofscapes serve a merely inert, protective and deflective role, protecting the contents and integrity of a building from rainwater, sunlight and temperature differentials, or just a site for unsightly mechanical plant. Most are clad in materials that degrade on exposure to the elements, becoming a maintenance liability rather than a productive asset.

Solar generation, rainwater harvesting and green roofs have prompted the beginnings of an identity shift which, in the immediate term, promotes increasing urban biodiversity, beautification and operational cost reductions by substituting reliance on centralised utilities. These roles for roofscapes are largely in their infancy. Rainwater harvesting continues to attract a return on investment concerns in the UK; solar generation suffers from volatile and politicised financial incentive structures, while green roofs have long outgrown their popularity to become just another planning condition. What is needed is a more radical interpretation of a roofscape as the highest plane of an ‘urban skin’, the interface between the city and the sky where the next epochal shift in decentralised energy-capture beyond electricity must occur to complement the gains of the internet age.

Architects and planners frequently use the term urban fabric, a reference to the inert patterns of built massing, interstitial spaces and infrastructures that describe a city. An ‘urban skin’ builds upon that definition and posits an additional analytical lens that considers their activity: their absorptive, deflective, diversonary and protective roles in managing incident, natural resources. Eventually, with the onset of Circular Economy thinking, these activities will integrate with urban waste streams (heat, nutrient, water) and other forms of excess capacity (labour, transport) forming hyperlocal industrial ecologies that could move cities from their current, overtly consumptive paradigm into a more resilient, productive alternative.

Urban rooftop farming is one of the more elegant applications of these ideas. In its most idealised form, it employs incident natural resources; integrates intelligently and intimately with their host buildings and communities; captures local waste streams and serves hyperlocal markets with a fresher, more accountable, more flavoursome (on account of its emancipation from food miles) and cleaner product. Its proximity to market offers it the flexibility to sell directly to consumers and respond more immediately to their demands, enabling the introduction of new, underserved varieties of produce. Crucially, food prices would stabilise, freed from global commodity markets and kept as low as possible through reduced dependence on utilities. Eventually, urban farming’s grand plan includes substituting open field industrial agriculture and releasing land back to forestry.

The challenges are also significant.
3–4 A&F’s ideas for the Ringcross Estate and the major Tesco supermarket in Brixton to retrofit horticultural greenhouses.

Modernist social housing schemes are rich retrofit opportunities and significant sources of flat, vacant rooftopscape with surrounding space that could accommodate access cores and new service risers

Finding the right rooftop over an adequately structured building with adequate human, service and logistical access, and all within a catchment area with an appetite for hyperlocal fresh produce willing to pay a premium is a needle in a haystack proposition for retrofits. Most of these are more manageable with new-build, though planning restrictions will still apply while the concept remains without precedent and supporting legislative guidelines. Supermarkets remain the lowest-lying fruit thanks to the immediacy of the point of sale. Schools, sheltered housing and other institutions offer educational and therapeutic opportunities. Residential integrations could be community forming in scope.

North America currently leads the field with two distinct models of rooftop farm business as exemplified by Gotham Greens and Lufa Farms. New York’s Zone Green text amendment is a permitted development planning legislation allowing rooftop greenhouses on commercial and institutional buildings to a maximum height of 25ft and a footprint 6ft within the host roofline.

Zurich-based Urban Farmers have recently completed their 1,500sqm aquaponic rooftop greenhouse over the vacant De Schilde office building in the Hague. The greenhouse occupies the rooftopscape, while the 700sqm of the top floor accommodates fish tanks, services and other logistical spaces. Their plan is to convert the building into a demonstrator project of novel urban farming technologies through partnerships and rental agreements with providers.

London has ventured into high-tech urban farming with two notable artificially lit, indoor farming businesses concentrating on high-value, quick turnaround salad leaves, herbs and microgreens. GrowUp and Growing Underground are exploiting the vertical stackability and considerable (and growing) energy efficiency of LED lights for low-rise, leafy and micro-green plants on hydroponic trays. The consistency of inputs and outputs is a major benefit of the Plant Factory mode of vertical farming, which has attracted considerable investor attention for its bankability.

Tall fruiting plants like tomatoes and peppers cannot exploit this verticality bonanza economically given their already considerable height, high energy demand and considerably lower fruit to plant weight ratios. Rooftop greenhouses are better placed to deal with them as they are more judiciously arranged as a single layer crop. Coordination, rather than competition between these modes, will be essential to creating a new hyperlocal food production capacity.

London’s rooftops have two notable low-tech greenhouse interventions with mildly commercial mandates. The Culpeper gastro-pub in Aldgate has a small retrofitted greenhouse nursery where plants are incubated that eventually supplement their kitchen. The ‘grow your own’ narrative has supported long waiting lists and a recognition for their craft. In 2010, Azul Valerie Thome established FOOD from the SKY – a soil-planter and plastic-bottle greenhouse rooftop farm and educational event space over Budgen’s store in Crouch End. The hyperlocal, organic produce grown by its experienced farmers and volunteers made its way downstairs to a branded stand, attracting strong sales. FOOD from the Sky unfortunately closed down in 2014 when a roof leak was apparently discovered that led its founders to seek alternative premises. Having hosted countless horticultural training, arts events and discussions around food polemics, it heroically carved a modest precedent in how rooftop farms might go beyond mere production and play a community-forming role.

At a domestic level, Charlie Paton, the inventor of the Seawater Greenhouse and prolific urban farming advocate, installed large rooflights on his Hackney terraced house. On the top floor he installed a simple, tall-plant hydroponic system and grows tomatoes using sunlight. Paton found the excess internal heat gains were worth capturing and diverting through a sensor-driven fan and riser distribution system, which eventually rendered the central heating system surplus to requirement.

THE EMERGENCY PROJECTION

In 2012, the London Rooftop Agriculture: A Preliminary Estimate of London’s Productive Potential study estimated that within London’s 1,572 square km there are approximately 200 million sqm of total rooftopscape; 92 per cent of it is pitched and inert.

With a population of 8.2 million people, each consuming an average 150g...
of greenhouse, fruiting-plant products per day (tomatoes, cucumbers, peppers, etc.), Londoners would demand a total of 450,600 tons of fresh produce per year. Employing a conservative figure of 40kg/sqm/year average productivity for greenhoused water-based growing (where tomatoes are 40-80 kg/sqm/yr, and peppers are 25-30kg/sqm/yr), retrofitting, converting or integrating rooftop greenhoused production over 5.6 per cent of London's total roofscape could conceivably meet that total demand. Commercial considerations aside, such a move is valuable as an emergency response to severe supply chain disruption.

THE OVERNIGHT PROJECTION
In 2009, I estimated that London's total flat roofscape was 1,600 hectares. Most of this space is on extensions to otherwise pitched, detached and semi-detached residences. Inspired by Mark Ridsdill Smith's Vertical Veg blog documenting the illuminating growing potential of these spaces, I calculated that Londoners could overnight establish a productive capacity fulfilling 5-10 per cent of London's fresh produce demand, simply by refashioning containers into open-air planters, filling with soil, seeding and laying out efficiently. Small, domestic, rooftop greenhouses could offer two or three times that amount.

ESTATES PROJECTION
Modernist social housing schemes are rich retrofit opportunities and significant sources of flat, vacant roofscape with surrounding space that could accommodate access cores and new service risers. Integrating anything over the heads of active communities is naturally going to be challenging if careful consultation is not carried out. Social enterprise models with softer commercial outlooks and more social impact mandates might be better placed to accommodate these challenges.

My consultancy Architecture & Food (A&f) collaborated with Hyde Group estate managers, an urban farming specialist from Arup, and two horticultural consultants on a hypothetical competition entry to retrofit a high-tech horticultural greenhouse operation over the roofscape of the Studley Estate in Stockwell called Studley Hyperlocal. It would manage its social compact with that community through a new, resident-led, urban commons called Studley Commons. Studley Hyperlocal would cede a proportion of its equity to Studley Commons yielding a social dividend, with which further funds could be leveraged for community-forming interventions in vacant and underutilised spaces or renovations. It included a community kitchen and grocer as a point of sale, hosting events, food literacy and cooking and horticultural training programmes supported by the horticultural operation. A functional relationship would give the horticultural operation a self-actualised, motivated marketing department of hundreds of voices, while the community would gain an income-generating vehicle contributing to its civic identity.

Within the borough of Islington, retrofitting greenhouse operations on the following six, flat-roofed housing estates identified by A&f’s London Rooftop Farm Survey – Bemerton, Popham Street, Popham Road, Girdlestone, Redbrick and the Ringcross Estate – could supply 14 per cent of the borough’s demand for fresh, greenhouse horticulture produce assuming conservative productivity values.

NEW-BUILDS
In 10 years, London's population will grow by one million people. For every Londoner, the city has 25 sqm of roofscape. If we are to assume the ratio is maintained, 25 million sqm of new roofscape will be built. If 50 per cent of that area were committed to production at 40kg/sqm/yr, the capacity would meet 100 per cent of London's demand. Opportunities to optimise the metabolites of the model would be readily available and such an endeavour would require a mature, supporting legislative and incentives framework.

CONCLUSION
For the rooftop greenhouse to become a recognisable urban typology, its economics must justify its investment. Its integration must therefore be in synergy with its functions. For a start, it may offer a building owner or developer a diminished roof maintenance liability as responsibility would pass to the new tenant occupying a space typically left or designed to be vacant. As economic uncertainty spreads, pressure to squeeze optimum asset values will become pronounced. In the longer run, the very real concerns over our food system and its biospheric impact will come to the fore, incentivising ideas that are not only resource efficient, but in their absorption of incident natural resources, become resource effective.

Oscar Rodriguez, architect and founder of consultancy Architecture & Food
Urban Farming and Family Farms

Olusola Olufemi describes examples of farms in three very different cultures

‘Small farms have been a historic bedrock of cultures...and they can be a crucial part of more efficient, ecologically rational agricultural systems that sustain dignified livelihoods in the future’ (Weis, 2007, p.9).

Urban farming, family farms, or families engaged in farming constitute an integral part of the food and city conversation. The contribution of family farms (about 570 million family farms globally) to livelihoods and food security cannot be overemphasised when one in eight people go hungry daily and, as we look towards 2050 to sustainably secure ‘our hungry planet’ with sustainable food production and healthy diets. 2014 was declared International Year of Family Farming. Family farming is a means of organising agricultural, forestry, fisheries, pastoral and aquaculture production, which is managed and operated by a family and predominantly reliant on family labour, including both women and men. ‘Family farms represent the dominant form of agriculture in most countries. They range in size from tiny, subsistence holdings to large-scale, commercial enterprises, and they produce a vast range of food and cash crops in all kinds of agro-ecological conditions’ (SOFA, 2014, p.8). Alluding to ensuring a food secure planet, the second Sustainable Development Goal affirms the need to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture; two of the targets aim by 2030 to: Double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment; and Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

This article examines urban farming and family farms across three cultures from Wageningen in the Netherlands, Toronto in Canada, and Ibadan, Nigeria.

PARADIJS FARM, THE NETHERLANDS

Paradijs Farm is a multifunctional family ‘care’ farm established since 2006 on the previous site of a defunct farm, and rapidly expanding in demographics and activities. Currently in the Netherlands the number of care farms has increased at an alarming rate from 75 in 1998, to more than 800 in 2008. There are about 570 certified care farmers in The Netherlands.

Paradijs Farm’s activities represent 60 per cent care and 40 per cent agriculture. The farm provides therapeutic care for the elderly (aged 60 and over), autistic children (up to 16 years old), people with dementia, Down’s Syndrome and Parkinson’s disease. Knowledge, passion, care, and good living form the core of the farm’s values. Care farming is becoming increasingly popular and widely accepted in the Netherlands for the elderly, those suffering from mental health problems, children with autism and the mentally or physically handicapped. It is a form of green care with the associated benefits of being around nature.

Originally Paradijs Farm covered about 60ha, but now about 20ha have been rebuilt to accommodate mixed farm activities which include livestock care (cows, goats), petting zoo, vegetable garden, horticulture, horse riding, feeding or grooming, and an organic farm with about 6,000 chickens. It serves the local food market within 60-80km radius. Paradijs Farm forms part of a farmers’ park corporation, comprising about 13 farmers collaborating together in the region. Farm produce is sold to local hotels, restaurants and universities. It makes a connection between city and rural production through care, education (raising awareness) and food production.
Paradijs Farm brings a new perspective to development and farming (having a clear production process and business plan), the notion of the farmer as entrepreneur, inter-generational farming, social integration, getting back to nature, and consumers prepared to pay but wanting to know the origin of their food due to a lot of food scandals‘ (Discussion with farm manager, October 2015).

**BLACK CREEK COMMUNITY FARM, CANADA**

Black Creek Farm is located in a high-density, low-income built-up neighbourhood of Jane and Finch, Toronto. Black Creek Community Farm is a youth-focused urban farm on the City of Toronto’s land, leased from the Toronto and Region Conservation Authority (TRCA). The TRCA’s idea of a living city vision with an agricultural policy focus is showcased in the Black Creek Community Farm. The six-acre urban farm focuses on empowering the youth in the community in food production (with organic produce for sale) and horticultural skills training, plus recreational activities.

Other urban farm projects on TRCA’s land holdings include a working farm developed at the Kortwright environmental education centre in Vaughan, and the McVean Farm, designated Category A heritage resource, which is located on conservation lands with 37 acres. It provides a New Farm Incubator Program offering access to land, equipment, business plans and technical training. The Places to Grow Act and the Growth Plan for the Greater Golden Horseshoe in 2006 as well as Ontario’s Greenbelt Act in 2005, protects 1.8 million acres of environmentally sensitive and agricultural land around the Greater Golden Horseshoe area.

Residential developments incorporating rooftop gardens, community gardens as well as urban farms into their design are gaining prominence in Toronto. Gallant and Wekerle (2009, p31) note that ‘the rise in incorporating farms into residential developments may reflect growing concerns for food security, food safety and local food and there is greater public awareness of food issues... resulting in pressures to provide more opportunities for food production in urban and peri-urban areas that go beyond community gardens and allotments’. Farm subdivisions ‘have a number of distinct forms, providing different models for preserving agricultural land, growing local food or financing agricultural operations. Some focus on open space preservation and ecologically important landscapes, including farmland. Others are designed around a plethora of local food initiatives. They are initiated by developers, government and non-profits’.

**ALTONA LEA FARM, CANADA**

Altona Lea Farm covers about 750 acres with about 55 cows. The barn was built in 1910 but the parents of the current owners bought it in 1978. Located on favourable topography, the farm cultivates soybean, wheat, barley, corn and hay for horses. Altona Lea Farm is a family-focused dairy operation anchored by their three-time Master Breeder Herd of Holsteins. Altona Lea is a champion producer earning high county herd production and milk quality, and Lifetime Production awards. The family has bred the Grand Champion variously between 1992 and 2005 at the Royal Highland Show in Scotland and has exported cattle to the United Kingdom, Scotland and Ireland.

The challenge however, is the rapidly expanding metropolitan development in the Greater Toronto Horseshoe especially Durham region, coupled with the extension of Highway 7, which is rolling north and so some farms (especially dairy farms) are moving further north and rebuilding. There is a debate between white-belt land and greenbelt land, and the conundrum is between preserving the land and taking money from the developers. However, the greenbelts seemingly slow down development. ‘Our herd is uniquely suited to provide young stock that has the potential to be foundation animals for herds around the world. Development is coming to farming and displacing farms’ (Discussion with farmer, 2014).

**ROMSKY RANCH, NIGERIA**

Most family farms in Nigeria are located in rural-urban peripheries, at the boundaries of major cities or in secondary towns bordering major cities or rural communities. Romsky Ranch covers about 10 hectares, and is located in Lagelu Local Government Area, Ibadan, Nigeria. It
contributes to feeding families, the local food system, community development and food security within the cities (Lagos and Ibadan) by creating direct access to fresh farm produce at affordable prices.

Accessing food grown locally is sustainable and the food value chain is based on local food production, from farm to fork. The Ranch is equipped with a modern farm house (two rooms) and two other thatched houses, which serve as residences on the Ranch. There is a fully functional borehole facility with 8,000 litres overhead storage tank capacity, both for water consumption and future irrigation plans during the dry season, a generating plant with 5 KVA capacity, and a mill.

Romsky Ranch is family-owned and began in August 2013. Its produce includes plantain suckers intercropped with the pineapples. Yams and maize were also planted and there are two separate 3,000 fingerlings capacity fishpond on the farm. Romsky Ranch adopts the intercropping method of cultivation. 48 cattle heads were raised for eight months but due to mismanagement by the handler and increasing mortality, the farmer was forced to sell them. Six rams and six goats were also raised alongside the cattle on the ranch. Harvested produce e.g. plantain, pineapples and yams, is targeted to feed families within (including road-side food entrepreneurs and retailers) and beyond the local food shed and given to different families and at times of huge crops taken to the market to sell.

Labour in the farm is predominantly manual. Apart from the cattle herders, who are Fulani (nomadic pastoralists) from the northern part of Nigeria, local labour is erratic and has to be sourced from neighbouring countries like Togo. Men work on the farm especially during rainy season, and women within the community are often hired on a daily basis for harvesting and maize shellling. Embedded in the preservation of the agricultural, ecological, and local cultural attributes, Romsky Ranch is located in a virtually virgin, pristine land, or natural habitat where the land use is primarily agricultural, incorporating pastoral activities and wildlife. The land has palm trees referred to as money trees and these have become source of livelihood for palm wine tappers (fresh, undiluted palm wine is derived from the trees). The palm trees are also source for making shea butter, palm kernels, and red palm oil.

COMMON DENOMINATORS
Family, food access and availability, contribution to the local food economy, innovation, preservation, entrepreneurial farmers and green care (nature, restorative health, mental, social connection, physical activity and therapy) are some of the common denominators that connect these three urban farming cultures, specifically:

- the scalability in terms of the local or regional coverage, the size of the farms – small to medium scale
- the opportunities for enterprise, where most of the owners have business skills, innovation, market-based and supply chain management
- sustainability in terms of green care and preservation.

Consequently, planning tools, urban design approaches to ensure minimal degradation of the ecosystems, and the utilisation of land and nature should revolve around these common denominators.

The farms have locational and spatial advantages reaching a wider catchment area within their respective regions and they already exhibit some of the principles of New Ruralism, reconnecting people, farmers, landowners, local administrators, traditional leaders and developers with the land, in a sustainable way. They serve the sub-regions and in terms of scalability they extend beyond the local food belt and are part of the local food cluster. Connectivity, good habitat management, preservation of biodiversity and infrastructures are germane to New Ruralism, while family farms are central to addressing hunger, poverty, malnutrition in the rural and sub-regional areas and in preserving the natural environment against degradation. Thus, New Ruralism principles and farm subdivisions seem to be major factors in the planning and design of urban family farms.

Though ‘New Ruralism is the preservation and enhancement of urban edge rural areas as places that are indispensable to the economic, environmental, and cultural vitality of cities and metropolitan regions’ (Kraus, 2006, p27), farm subdivisions proponents argue that subdivisions preserve productive farms, contribute to ecological sustainability, meet rising demands for local food production and bring farmers and consumers close together and they combine opportunities for residential development with community urban farms, horticultural education, youth training (Gallant and Wekerle, 2009).

These questions remain: do planners want to continue to separate agricultural land use from residential land use? How do planners want to accommodate the growing expansion of cities and its encroachment on agricultural lands and the greenbelts? What kind of planning tools (e.g. zoning regulations) need to be developed? How do we design food-friendly cities without compromising agricultural lands and greenbelts? How do we design around therapeutic urban farming that promotes healthy foodscapes and ecosystems?
The primary use of the land for family farms in the three cultures helps to preserve the habitat, ecosystems and wildlife, and to promote the area as a local food belt. With proper planning, communities in the vicinity could develop comprehensive plans (including conservation) that will integrate all farming activities and developments, and incorporate agri-tourism or food tourism operations that embed food festivals/local food flavours. Integrating the concept of New Ruralism or green urbanism into land use planning and farm subdivisions is pivotal to:

- Attaining sustainable, resilient food systems, and securing family farms that are threatened by land grabbing and encroachment by development
- Re-connecting with the land and nature, encouraging smart growth, and ensuring sustainable food production systems that utilise resilient agricultural practices to increase productivity, production, and maintain ecosystems health
- Helping family farms across the three cultures to work harmoniously with nature and present good practice for research and development, and a teaching laboratory for farmers especially the young, women and the marginalised.

Olusola Olufemi, Associate Professor of Urban and Regional Planning, and independent freelance consultant, mentor and educator

Edible Eastside

Jayne Bradley Ghosh tells the story of a Birmingham food garden

In September 2016, after five years of food production in the city centre of Birmingham, Edible Eastside will close. The third of an acre former gas-filling station is to be returned to the landowner, who has plans for its redevelopment. This day was always on the cards for us.

The land needed to create a model for an urban food system had to have the following criteria: be as close as possible to the city centre; appear improbable as a food growing space; and ideally, involve land where development had stalled. On a practical note, it would also need some element of enclosure so that we could secure it. I initially took the site on a ten-year lease (with a three-month break clause) at a peppercorn rent.

References

Our vision was for a city populated with pop-up food gardens on abandoned or derelict land, adding food production to the urban topography, a deliberate unplanned occupation

Creative industries are only just moving in. The Warwick Bar area had been masterplanned and its owners were seeking planning permission for a dense mixed use scheme in 2008, just when the credit crunch hit the property sector. The landlord abandoned the project when the banks withdrew their funding in early 2009.

To help me set up the project, I recruited a small team of four, who then became the directors of the not-for-profit company with the same name. The team was deliberately multi-disciplinary consisting of artists, public artists, architects, horticulturists and sustainability experts. When we opened for our first growing season in 2012, this was our ambitious mission:

‘Edible Eastside is a visionary initiative to transform a derelict brownfield site into a vibrant and contemporary urban garden for people to learn to grow plants and food. Edible Eastside wants to explore through a collaborative process, issues of urban resilience, sustainable development and the role of culture in climate change. It hopes to offer a centralised resource and strategic support for artists, architects, urban gardeners, community activists and regeneration agencies interested in urban food growing.

Our aim is to increase our understanding of urban productive landscapes with research in practice involving artists, designers, gardeners and chefs to explore a new aesthetic for urban environments.’

My own background in public art and community regeneration schemes had led me to explore food as a cultural resource, and to identify the absence of food system planning in neighbourhood renewal. Corner shops sold cigarettes, cans, newspapers, milk and biscuits. Where did people in inner city housing estates source their food from? Food deserts are a well-documented feature of city life. And so while a food garden can’t meet all of people’s food needs, it can suggest alternative possibilities. Could we go from a desert to an oasis?

From the outset the project approach was to create a demonstration of what urban food might look like. Given that the feature of cities is their changing urban form, land use and economic resilience, our hypothesis was that an urban agriculture scheme also needed to be flexible, adaptable and resilient, and be ready to move where the opportunity and needs are.

Our project would be entrepreneurial, not charitable. It would celebrate the fact that urban land would never be available for agriculture on any long-term basis. Given our location, people asked how a community growing space could operate with no community. Our industrial neighbours thought we were activists. We thought their wooden pallets and forklift trucks would come in handy. Like all the best inventions, we would create the demand and make our community.
RENT A PLOT
Our vision was for a city populated with pop-up food gardens on abandoned or derelict land, adding food production to the urban topography, a deliberate unplanned occupation. The project operated as a business. We rented container beds, which we called plots. They were 2m x 1m in size, filled with compost, ready for growing and costing £100 a year to rent. We adopted the allotment model of annual rents as a strategy to secure buy-in. Renters were our members, who would volunteer to help run the project as part of their rental agreements. The plots were designed to be mobile (using a forklift truck). Other income came from events, workshops and funded creative and workshop programmes.

The project was site-specific, responding to its limits and opportunities. We deliberately created a destination space, because as creative people, we were easily able to work with the space to create iconic imagery, play with the juxtaposition of the landscape, and add metaphor. We also worked with students of architecture and planning with a series of artistic events each year. We attracted over 2,000 people to our live art events, we hosted touring exhibitions and held seminars on urban food supply.

We also grew vegetables: we started with 12 plots and increased it to 40 plots within two growing seasons. Our place-marketing approach worked in so far as we became one of the many cultural destinations in the city, a regular Friday night hang-out in summer.

 Strategically, we situated ourselves within the context of the independent food sector that had also emerged in Birmingham over the last five years. Linked to our vision, we were food culture, not horticulture. Our wild-food café helped to shape what later became a cookery school programme and dining club, using the garden produce.

Before I opened the garden I was warned that it would take over my life. The ambition to see pop-up food gardens across the city became impossible in the sheer workload of keeping the single garden operating as a going concern. For example, in the hot summer months it took over two hours each evening to water the garden. Our rainwater harvesting attempts suffered from no guttering and we could never afford an irrigation system.

MOVING ON
We began looking for new sites in 2015 but by then the economy was picking up and it became harder for landowners to commit to any future timeframe. In addition, our vision for city-wide pop-up food gardens was not necessarily shared by the local authority. Despite much land still being unoccupied in city centres (on average about 25 per cent of land is vacant), overcoming the obstacles and putting land to food use is one of the many barriers to urban food growing, which keeps it in the margins of food supply. A bit of politicking would have made all the difference.

The proposed terminal for HS2 in Birmingham can be seen from our garden and will dominate the area. Our original landlord, ISIS, decided to sell rather than develop the site and sold it at the beginning of 2016. Inevitably it was time for us to move on as Eastside is again being primed for regeneration. With HS2 as the driver, confidence is high, and while I welcome the regeneration, we decided to close rather than move.

Our biggest impact was our ability to capture the imagination of visitors and users, who were sometimes overwhelmed by the lushness of the garden in such a gritty environment. The project attracted about 1,000 visitors a year and sustained a cohort of growers for five years. Most of our gardeners went on to have allotments.

The future of urban food growing is positive with interest remaining high. The evidence so far is that the social benefits of growing food outweigh any impact on the environment, food supply or diets. Our project was no different: I began a campaign to see food growing as a feature of city life because I care about food.

In the end people were inspired by our grassroots entrepreneurialism to shape the city as we wanted it to be.

It is not surprising that the urban population is expected to grow over the coming decades given rates of global population growth; estimates are that more than 60 per cent of people will be living in cities by 2050. This poses huge challenges, not least in how to ensure equitable access to nutritionally balanced and low-carbon diets.

The food and drink that we consume at home accounts for 11 per cent of the total UK consumption-based greenhouse gases. As the Centre for Alternative Technology report People, Plate and Planet (Blake, 2014) points out, beyond production, the transportation, packaging, processing, refrigerating and cooking of food, all contribute to this, as does the 42 per cent of our imported food. Climate change is also a threat to food security, with access, utilisation and price stability potentially affected.

With these issues in mind, how might we respond to these challenges through urban growing?

This is a question that the Allotment of the Future project started to explore through a week-long installation in Manchester city centre, part of the Science in the City festival. The aim was to promote an increased understanding of the science involved in food production, along with practical information and activities to inform everyday food choices.

Sustainability is the thread that weaves through all of URBED’s work, so when we were asked to help design and coordinate the Allotment of the Future installation, it felt like a natural fit. Beyond the salad crops that we grow in our office, we have a strong professional interest in the promotion of sustainable and healthy food systems. We worked on the Alpha Farm project commissioned by Manchester International Festival in 2011, exploring how far we could minimise the energy required for innovative indoor growing systems to work. These ideas, including aquaculture (fish), vermiculture (worms) and fungi-culture (mushrooms) were put into practice in the Wythenshawe Biosphere (delivered by Biomatrix Water) at Manchester College.

We are currently working with Liverpool-based Squash Nutrition and the local community in Toxteth on the designs for a new community food hub, complete with a shop, café, kitchen and growing space.

**Allotment of the Future Design**

Our brief for the Allotment of the Future was twofold. Firstly, it had to be an engaging public exhibition; something with scale and impact to get people interested. Secondly, it had to be relatable, allowing visitors to envisage the future of food growing at the domestic scale; and, of the future but not so futuristic that people would feel it was beyond their reach.

This led us to develop the design around a one-metre grid populated with modules and planters. As well as offering flexibility and ease of assembly, this scale worked well with the space available within St Ann’s Square, Manchester, allowing a flow of people as well as space for activities. We were also keen that visitors could imagine this modular concept in their own homes. So, we explored typical balcony and terrace sizes, and devised a concept that would provide horizontal and vertical growing areas in similar small urban spaces.

For the planters and modules (finessed and built by Salford based M3 Industries) we adopted a simple material pallet that takes references from commercial growing systems. This seeks to differentiate the space from the typical rustic aesthetic of most allotments, but is still mindful of sustainability and could be achieved as a DIY project. We explored human dimensions and considered how we could create different sensory experiences by displaying crops at different levels. The planters are made from plywood and can be arranged in a variety of ways; either
directly on the floor (the perfect height for toddlers to explore, or with a lid, a comfortable height for a seat), hung within the metal frames to provide raised beds, or placed at the base with the taller metal frames providing the infrastructure for climbing plants. The galvanised steel of the key clamp frames provides a very low maintenance finish, and for the exhibition week provided a ready-made structure for the information on display. Mindful of creating a legacy after the week-long installation in St Ann’s Square, the modular design means elements can be easily divided and transported to new homes.

**ALTERNATIVE SOURCES OF PROTEIN**

Based on current trends, it is estimated that global meat consumption will reach 460 million tonnes in 2050, a 65 per cent increase on 2009. This places huge pressures on greenhouse gas emissions and land use. By reducing the amount of meat and dairy in our diets, emissions could be reduced by as much as 34 per cent (Blake, 2014). These themes are explored within the allotment by showcasing alternative crops with a particular focus on how we might grow protein domestically, using examples such as sorghum, a grain with a similar protein content to wheat that can cope with drought and high temperatures, and algae rarely considered in our urban diets but a sector with rapid growth (estimated at 10 per cent each year) with the protein content of some species as high as 35 per cent.

Mushrooms are another healthy, high protein alternative to meat, that Squirrel Nation are exploring with Farmlab, an award winning pop-up farming experiment. Fungi are incredibly effective at recycling nutrients; in this case the used coffee grounds from the adjacent coffee cart are used as a growing medium for fungi spores. Throughout the week people were invited into the lab to make their own DIY mushroom bag, and could see and taste the mushrooms fruiting on site.

Insects are already eaten by around 30 per cent of the global population and are seen as an excellent source of protein, calcium and iron. Despite this, consumption in Europe is very low; according to the Food Standards Agency, there are just 13 companies in the UK selling insect products. This is partly due to food safety regulations which restrict the import of insects into Europe, although undoubtedly the psychological hurdle amongst consumers also needs to be tackled. At the allotment, information explored the benefits of insects as a food source, and at workshops visitors were encouraged to try crickets.

Through cooking demonstrations, the Tyndall Centre for Climate Change Research and Real Junk Food Manchester explored how our shopping basket might look in 2050, with staples like potatoes, corn, bread and dairy (as well as cocoa, wine and beer production) all potentially suffering from fluctuations in precipitation and temperature.

**GROWING IN URBAN SPACES**

The community organisation Real Food Wythenshawe showcased both familiar crops (leeks, carrots, peas and tomatoes) and the more unusual (corn, tomato-tatoes, cucamelons and lentils), showing the possibilities of growing food in small urban spaces. This theme carried through to the hydroponics installation built by Sow the City, demonstrating that technology can facilitate higher yields from small spaces. Here the plant roots are grown in an inert material which has a nutrient-rich solution running through it, and the pump is powered by a solar panel.

**THE IMPORTANCE OF SOIL**

Working with scientists from the University of Manchester and Salford, the allotment also communicates the importance of soil to food security, key threats being the depletion of nutrients and loss to erosion. Soil is also vital to our efforts to mitigate climate change, with soil and peat lands both acting as huge carbon sinks. Two large soil profiles explored the different layers and properties of soil in different environments, the chernozem profile being particularly fertile and capable of supporting both crops and livestock. For the domestic and urban grower, soil quality can be improved by using particular plants such as lupins and peas to add and fix nitrogen.

The Allotment of the Future project demonstrates that design has a role to play in the future of urban food production, as well as creating fun, friendly and educational spaces in the city that work for both people and wildlife. As professionals, we can seek out opportunities to design spaces that work more intensively and incorporate food growing, and to encourage our clients to understand the importance of food in creating resilient communities. We should also embrace the opportunities for exciting collaborations with other creative professionals, experts and community organisations. We hope that we have successfully designed a platform that showcases the innovative, unusual and familiar elements, from algae through to peas. But more importantly, we hope this provides a basis for the conversations that we all need to be having about how we feed ourselves in the future.

Helen Grimshaw, Senior Sustainability Consultant and Jie Lu, Urban Designer, URBED

**REFERENCE**

The Food Parliament: An Infrastructure for Resilience

CJ Lim describes a vision for the future

‘Parliament examines what the Government of the United Kingdom is doing, makes new laws, holds the power to set taxes and debates the issues of the day. The business of Parliament takes place in two Houses: the House of Commons and the House of Lords in the Palace of Westminster, more commonly known as the Houses of Parliament. The architecture has transformed from royal residence to the home of a modern democracy and has continually evolved, sometimes by design, sometimes through accident or attack’.

(www.parliament.uk 2014)

The Rockefeller Foundation’s president, Judith Rodin, has defined resilience as ‘the capacity to bounce back from a crisis, learn from it, and achieve revitalisation. A community needs awareness, diversity, integration, the capacity for self-regulation, and adaptiveness to be resilient’. Society can only be resilient when the city delivers basic functions to its entire community, in both good times and bad. The resilience movement also has important roles to play in both ensuring that current architecture assets and cultural heritage are protected from long-term and acute effects, and developing revolutionary new spatial programmes and systems fit for the challenges of the 21st century. The effects of climate change on the built environment are not limited to changes of weather, but include the impact on architectural efforts towards changes in behaviour, demographics, population growth and economic environment. Globally, governments are now acknowledging that future built environment efforts towards resilience can provide potential multiple benefits to cities.

A FOOD LEGISLATIVE BODY

The Food Parliament is the fictional supreme food legislative body for London and its territories. Reimagined here as a landlocked sovereign city-state, it has an area of approximately 3.15km² overlaid onto the existing city. As a secondary infrastructure, the Food Parliament functions as a holistic ecology: an environmental strategy and food system that is self-perpetuating yet engaged in a symbiotic dialogue with contemporary London below. The main territory of the Food Parliament sits 100m above sea level and traces the outline of the historic City of London, defined by the defensive London Wall built around AD 43 by the Romans to enclose Londinium. Twenty-eight new vertical service-circulation cores, a network of appropriated satellite parks, disused sites and streets named after influential food sources constitute the extension of the infrastructure into the city.
The Food Parliament enjoys similar privileges to that of the City of London with a singular relationship with the Crown, and possessing a unique political status as a communal city. The formally unorthodox, collaborative parliamentary components promote the advantages of decentralisation and independence. The Food Parliament has three main pledges:

- to promote the city as the world’s leading international centre of excellence for food sovereignty;
- to facilitate local communities and individuals in the cultivation, processing and distribution of food within the city; and
- to disseminate the new notion of wealth.

PARLIAMENT REIMAGINED

The functionaries of the United Kingdom’s supreme legislative body are transfigured into tectonic analogues, responsible for tabling and implementing the new acts of parliament. Each tectonic analogue, steered by Erskine May’s guide to Parliamentary Practice, uses spatial relationships to reframe the spaces of food consumption and production, analysed through historical precedent, function and form. The characters are not human, but anthropomorphic totems that perform duties running in parallel to their real world flesh-and-blood counterparts. There are 646 Members of Parliament (MPs) regulating the city and responding to the manifold problems created by urbanisation. ‘Victoria Towers’ are water harvesters, the ‘Red Briefcase’ is a food repository, and ‘10 Downing Street’ an urban scarecrow. Simultaneously, the historical and geographical resources of early urban tectonics of London are appropriated to fuel the processes of the second city. The ‘River Thames’ collects urban organic waste and feeds it back into the agriculture above, instigating a waste-free cycle.

The Food Parliament propagates sustainable capital as part of the new economic model and is the support mechanism for transparency in local and national food governance. The city’s green micro-economy is rooted in the earth and the environment, establishing equality and shared accountability for the propagation of wealth. The Food Parliament is premised on the adoption of food as the local currency standard of London. Food is a commodity that is in increasingly short supply in the real world. World agricultural production has declined with severe natural global disasters and the rapid urbanisation of arable land. The rural is becoming urbanised through the migration of urban and peri-urban areas, and the appropriation of the rural for the burgeoning city. Simultaneously, food-producing nations are imposing food export restrictions, and constrained access to sustainable energy and water are further inhibiting affordable food. Given the failures of our debt-based monetary system, the fragility and unsustainable nature of our agricultural practices, and the social exploitation orchestrated by vast unregulated corporations, a reserve currency backed by the tangible asset of food, although improbable, is not illogical.

A GREEN RELIGION

With the Food Parliament comes a new green religion. The green ascription is protecting more than just food; it secures ecological and social wealth for the city by expanding the commonly received notion of wealth to include fresh air and water, natural daylight, green space and reduction of greenhouse gas emissions. Urban sprawl and the old building stock are synonymous with climate change issues, including air pollution from transport and the relentless increase in energy consumption, resulting in negative health impacts. The new infrastructure of the Food Parliament sets out an optimum environment for the city below to prevent the problem of increasing summer air-conditioning and winter heating. The innovative renewable energy technologies of the city silently co-exist alongside nature, harvesting solar, wind, bio and hydro energies, and recycle organic municipal waste for urban agriculture. Zero carbon deer-pulled carriages have replaced all London buses and taxis. In the past, London has failed to address the issue of energy consumption, as well as its food sourcing.

CULTIVATION AS A PRIORITY

Food cultivation, a typical oversight for most cities, is now at the heart of all urban planning and urban health initiatives in London. The Food Parliament has adapted city laws to address issues of land security and tenure, and declared indefinite free rights to cultivate food on disused private sites and vacant municipal land. The new micro-economy invites the English arcadia back into London; wildlife corridors and bio-diversity traverse car-free municipalities. The infrastructure of the Food Parliament accommodates the welcome return of locally grown food in London. Land is legitimately appropriated for bio-diverse green allotments of urban agriculture, and wild deer graze in public parks in a campaign to restore nature’s civil liberties. Urban kitchens and bakeries will only source food within a 10 mile radius. Consumerism is no longer the sterile, cursory experience redundant of supermarket aisles – students are alive with trade, gastronomy and ecology. The wetland habitat from the River Thames has migrated onto the city’s undulating rooftops, harvesting fresh rainwater for aquaculture and irrigation within repeated fish ponds perched on the skyline. Historically, the distribution of provisions to modern cities is tenuous, relying on transport and storage mechanisms that are taken for granted, but nonetheless vulnerable to natural and manmade disasters. Here, local fresh food is distributed along a green national grid without the historical overriding reliance on extensive food miles.

The second city acts as both a catalyst and support network for a safe, nutritious and life-enhancing diet that is agro-ecological, through social inclusivity, community and personal empowerment. Socio-economic responsibilities are devolved amongst London’s constituents with a user-centred approach, developing social relationships and trust through local food production to boost individual and collective recovery capital. Social enterprises nurturing food provenance and safety empower communities. The third age is no longer side-lined in demographic state policy – pensioners are invited to mentor a new generation of cultivators with their invaluable food related knowledge and experience. Food support partnerships may appear modest in scale but they play a vital role in stimulating the perceptual shift in how city dwellers think about and procure meals. The Food Parliament can demonstrate spatial phenomenology in the city, stimulating our eyes, ears, noses, minds and tongues – vision made real, social capital that can be tasted.

CIVIC SYSTEMS

The Green National Insurance Policy promotes sustainable vegetable cultivation
The Food Parliament hovers over the city 100m above sea level.

The popularity of the garden rekindles mankind’s natural bond with food, nature and society, offsetting contemporary introverted pursuits in digital media with real time.

The Food Parliament firmly believes in ‘prevention rather than cure’, and has invested in a local food distribution system and nutritious diet plan. Through the Nutritional Health Service, the second city communicates with its constituencies by employing gastronomic festivities, and disseminating nourishment and knowledge on wellbeing. The service also educates urban cultivators in methods of permaculture, composting and the use of biological controls. Permaculture enables the city to have a sustainable high-yielding ecosystem and increased biodiversity. The vertical allotments transform London’s skyline, providing city dwellers with a ‘green health centre’ to rediscover the meaning of hand-to-mouth existence. The popularity of the garden rekindles mankind’s natural bond with food, nature and society, offsetting contemporary introverted pursuits in digital media with real time.

IS THIS A REALITY?
The Food Parliament, a fertile plain over London busied by pollinating insects, and studded with lush agriculture, is a provocation. The physical absurdity of the proposal intends to raise serious questions about the priorities of our governing bodies and to engage individuals with issues of food sovereignty and climate change. However, the principles that underlie its premise and the justification for its existence, in some form or other, are both real and urgent. Food is the driver for the restructuring of employment, education, transport, health, communities and the justice system, re-evaluating how the city functions as a political and spatial sustainable entity. The Food Parliament ensures its constituents the freedom to exercise their new green religion, cultivating a green notion of wealth – the city is ready for the future.

CJ Lim, Professor of Architecture and Urbanism, The Bartlett, UCL and founder of Studio 8 Architects
Food and the City Reviewed

Jane Manning sums up the lessons to be learned

The articles in this issue of *Urban Design* have shown that growing more of our own food cannot just be considered as a ‘nice to have’ – one of those little bonuses sprinkled in at the end of the design process to make a scheme more palatable or score more points. Rather, the sheer challenge of feeding growing populations in a sustainable way, means that these ideas need to be mainstream and the principles integrated into strategies and schemes from the outset. If we want to see Brexit as an opportunity, producing significantly more of our own food isn’t a bad place to start.

But it is more than just about growing food. One of the most striking conclusions from the site-specific articles was the benefit that growing space has beyond environmental sustainability and nutrition. The social and mental health impact of making food space can be far-reaching. A big part of what motivates us, as designers, is the idea that we are making people’s lives better: more enjoyable, more fulfilled and more convivial. If we want to avoid the now widely predicted mental health disaster from coming over the next 50 years, we will need to broaden our responses to the housing crisis from simply piling lots of small housing boxes on top of each other, to creating homes and neighbourhoods that contribute, rather than restrict, residents’ health, both physical and mental. Food will be central to this.

It could be about rethinking the role of farms around the urban-rural fringe and, dare I say it, the green belts of the larger UK cities, to act as more interactive spaces for food production and social care. It could be about accepting that neither the local church nor the local pub will be the centre of local communities in the future, but rather the community garden. Closer to people’s homes, it will be about making sure every home has the scope to grow something, whether on balconies big enough to accommodate a module of URBED’s planters or roof top greenhouses on every housing estate block.

One aspect of food and its relationship with the city that has been evident for some time and will no doubt increase in importance, is the retail of locally produced food: the farmers’ markets, the independent cafes and restaurants. Substantially extending the sale of local food into the average weekly shop has not yet been achieved, but could be. Examples such as OrganicLea in the Lea Valley illustrate a stepping stone towards this, with an extensive nursery garden on the urban edge and shop outlet and cafe in the high street. Broader trends of how we might buy our weekly food shop and have food delivered in the future are less clear. In Amsterdam, businesses are already distributing food to the restaurant trade and local supermarkets by bike, transforming the nature of servicing in the streetscape.

For designers, all of this is really exciting. It is a big challenge right at the scale we work best at. Many designers will have been thinking along these lines for years; for others the issue is now coming into focus. It is fair that for many urban designers, architects and planners, food production and logistics are a step outside their comfort zone, unless they were lucky enough to grow up on a farm or to have an allotment. However, we are used to bringing in other disciplines and specialists, and we work very well as the fulcrum between multiple disciplines. Designing for productive landscapes must now become another string to our bow.

Reinventing building and block typologies and creating new ones will be needed, carving out growing space from floor plans and sections. There will be challenges for public realm design, where growing space will need to be integrated across the public-private space definition. The best masterplans will need to use growing space in a creative way rather than a protective way, opening up community gardens rather than defending allotment boundaries.

This issue of *Urban Design* has only scratched the surface of the subject, and there are many aspects that we’ve not been able to cover: street food and food distribution are just two examples that are continually evolving and will no doubt head in directions we cannot yet anticipate. The issue of feeding communities in a sustainable manner will become increasingly critical, and therefore we must take up the challenge, join the debate and design our way out of the problem.

Jane Manning
Re-framing Urban Space, Urban Design for Emerging Hybrid and High-Density Conditions


This book addresses head on an increasing preoccupation of policy makers around the world: how to create high quality, liveable and sustainable urban spaces in areas of high density. Whilst for many cities – New York, Hong Kong and even Paris – these are hardly new concerns, for many others widespread densification and its implications are relatively new and urgently need to be grappled with.

In London, the New London Architecture’s recent study, revealing that 250 or so new high-rise buildings were in planning or under development, sent shock waves through the city. But perhaps it shouldn’t have. If you regularly travel on a suburban train line out of the city, this is plain to see, although perhaps it is difficult to get a sense of the impact across London as a whole. At a smaller scale, similar processes are happen-ing in major cities across the country, and whilst their respective skylines are of concern to many, for me it is the physical and social impact on the ground – on the public realm – that is of more concern.

But is this the fault of densification per se, or just our inability to design well at higher densities? Jane Jacobs commented that we need to build at densities in excess of 100 dwellings per acre (250 per hectare) in order to force people out onto the street and invigorate the public realm. She cautioned, however, that above 200 per acre we inevitably see uniformity in design, and this should be avoided. But we are nowhere near that and even our densest boroughs in London, at around 70 per hectare, are well below Jacob’s lower threshold, and this reduces to less than 10 per hectare in some outer boroughs. Clearly some cities do density much more consistently and convincingly than us.

The authors of this intriguing book do not specify what they consider to be the optimum density in cities, but instead argue that higher density is a necessary pre-requisite for complexity, intensity and urbanity and that there are overwhelming benefits of building at higher densities. The book examines what this means for public spaces and where to look for inspiration and best practice.

In their search they examine over 50 global examples that they systematically dissect, using a framework to understand how they came about, what works and what does not. They alight upon the concept of ‘hybrid urban space’ in order to understand the types of spaces that emerge when we start to build more densely. In others words not the streets, squares and parks of the traditional city, but instead a dissection and re-combination of these and other urban and infrastructural elements in order to deal with new situations of density.

In doing so, the authors define three overlapping modes of hybridisation present in high density contexts: spatial hybrids, programme hybrids, and operational hybrids, or the physical context, uses, and management of spaces respectively. These are found in the case studies that are in five categories: intensified residential developments, mixed use developments, infrastructural transit-led spaces, recreational green hybrids, and hybrid urban voids (the final category referring to bits of the city that have been reclaimed).

This is an interesting book, packed with examples, high quality illustrations, and thoughtful analysis that has much to teach us about the implications for the public realm of building at higher densities. Whilst I remain to be convinced of the need for a new language of hybridisation to discuss these, this book represents a valuable contribution to the literature and our understanding of public space in a fast changing world.

Matthew Carmona

Rethinking Smart Cities From the Ground Up

Tom Saunders and Peter Baek, 2015, Nesta, Download from www.nesta.org.uk

This short e-book highlights many of the issues that smart cities need to address and argues that the smart city movement should combine the best aspects of technology infrastructure while enabling greater collaboration between citizens and city governments. It encourages cheaper methods of tackling urban problems using Internet based apps that involve citizens more: this is referred to as ‘smart cities 2.0’. After reading this and other smart city literature, I am convinced that we urgently need ‘smart city 3.0’, which would include the design and planning perspectives. This report results from an interesting, even surprising, collaboration between Intel China (a US high tech company normally associated with the expensive big data smart city), the independent not-for-profit company Cinnovate supported by the Chinese Government, UNDP China (who will be publishing the full set of case studies later) and Nesta, a UK innovation charity. The aim of the study is to inspire and guide smart cities in China, which is claimed as the site of most smart city experiments. India, which is promoting 100 smart cities, is probably neck-and-neck with China.

The authors highlight how smart cities have failed to deliver on their promise by promoting and finding uses for big expensive solutions to solve pressing problems for citizens. The report begins with a history of smart cities exposing the four flaws of the original smart city vision: Starting with technology rather than urban challenges; insufficient use or generation of evidence; lack of awareness of how others are trying to improve cities; and little role for citizen engagement. It concludes with five policy recommendations for city governments that make this a really useful and essential read for all those involved in urban planning.
The End of Automobile Dependence. How Cities are Moving Beyond Car-based Planning


Think of automobiles and the image of a gas-guzzling, be-finned monster of the road comes to mind. It is upon this image that this book is based. It is the third, and last, in a series from the authors.

The first, Cities and Automobile Dependence was published in 1989, followed in 1999 by Sustainability and Cities; Overcoming Automobile Dependence. The authors draw from a long-standing and broad dataset, developed by them and known as the Global Cities Database. The earliest data goes back to 1960 and runs up to 2000, and it draws on information from 26 cities across the world. Of particular interest to the authors is the growth of ‘vehicle-kilometers-travelled (VKT)’, a key factor which increased steadily over the first 40 years of the database records and is now reducing.

The book is divided into eight chapters examining: the rise and fall of automobile dependence, patterns of urban transport in cities worldwide, car dependence in emerging cities, a theory of urban fabrics, the utility of transport planning, what is inhibiting the end of car dependence, the consequences of ending car dependence; it concludes with a look at Life after Automobile Dependence.

The authors clearly have a mission: they are troubled by the impact of cars both on the form of cities and on global energy use. They view the reduction of individual car use as a positive benefit to the world as a whole and to the character of cities, which they believe are likely to be re-urbanised rather than suburbanised. In developing countries, where the authors believe car dependency is most damaging, they see two problems: a lack of good data and the increasingly difficult task of introducing public transport systems in rapidly and haphazardly expanding communities.

The authors see future urban transport as being increasingly focussed on walking, cycling, rapid transit systems and on TODs (transit-orientated developments). It is unfortunate that having such a rich vein of historic data to mine, they seem blind to the potential impact of autonomous vehicles and their potential for delivering a transport system that uses sustainable energy, does not rely on major infrastructure development as it can use existing highways, and can deliver flexible transport without the need for large car parking areas. It is perhaps unfair to judge this piece of work on predictions it does not make, because this is a valuable examination of car usage and provides a useful introduction to the Global Cities Data-base.

Richard Cole architect and planner, formerly Director of Planning and Architecture of the Commission for New Towns

ALSO RECEIVED

The authors of this small book see themselves as the genuine heirs of Ebenezer Howard and attempt to interpret his ideals and ideas to today’s environment. Having analysed the original text, they put forward twelve principles that would constitute the basis of a future true Garden City. Communal land ownership, energy efficiency and participatory planning are seen as important, not the planting of trees or nostalgia based architecture. This radical manifesto will struggle to find a responsive audience today, but the attempt is commendable.


A mixture of history, anthropology architectural theory and sociology is used to analyse various aspects of the city from the bottom (pavement) to the top (horizon) and from the small space (room) to the large one (parish), it also considers the role of the street in making a successful place, and finally the urban garden and its artificial representation of tamed nature. This is a very personal and idiosyncratic book, not easy to read but with some interesting insights.

Sebastian Loew
**Practice Index**

The following practices and urban design courses are members of the Urban Design Group. Please see the UDG's website [www.urbandesigndirectory.com](http://www.urbandesigndirectory.com) for more details.

**ADAM URBANISM**
Old Hyde House
75 Hyde Street
Winchester S023 7DW
T 01962 843843
C Hugh Petter, Robert Adam
E hugh.petter@adamarchitecture.com
www.adamarchitecture.com
World-renowned for progressive, classical design covering town and country houses, housing development, urban masterplans, commercial development and public buildings.

**ALAN BAXTER & ASSOCIATES**
70 Cowcross Street, London EC1M 6EJ
T 020 7250 1555
C Alan Baxter
E abaxter@alanbaxter.co.uk
www.alanbaxter.co.uk
An engineering and urban design practice. Particularly concerned with the thoughtful integration of buildings, infrastructure and movement, and the creation of places.

**ALBONIC SACK METACITY ARCHITECTS & URBAN DESIGNERS**
PO Box 9357
Grant Park, Johannesburg
02091 South Africa
T +27 71 492 0633
C Monica Albonico
E monica@albosack.co.za
W www.asmar.ch
A multi-disciplinary practice specialising in large scale, green field, urban regeneration and upgrading strategies, as well as residential, special and educational projects.

**ALEN PYKE ASSOCIATES**
The Factory 2 Acer Road, Kingston-upon-Thames KT2 6EF
T 0300 8549 341
C David Allen/ Vanessa Ross
E design@alenpyke.co.uk
www.alenpyke.co.uk

**ALLIES & MORRISON: URBAN PRACTITIONERS**
85 Southwark Street, London SE1 0HX
T 020 7931 0100
C Anthony Rivkin
E araffe@alliesmorris.com
W www.urbanpractitioners.co.uk
Specialist competition winning urban regeneration practice combining economic and urban design skills. Projects include West Ealing and Plymouth East End.

**AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE UK LTD**
Gables House Kenilworth Road, Leamington Spa, Warwick CV3 6JX
T 01926 439 000
C David Thompson, Technical Director
E david.thompson@amecfw.com
W www.amecfw.com
Masterplanning, urban design, development planning and landscape within broad-based multidisciplinary environmental and engineering consultancy.

**ANDREW MARTIN PLANNING**
Town Mill, Mill Lane, Stebbing, Dunmow, Essex CM6 3JN
T 01971 855865
C Andrew Martin
E andrew@am-plan.com
W www.am-plan.com
Independent planning, urban design and development consultancy. Advises public and private sector clients on strategic site promotion, development planning and management, planning appeals, masterplanning and community engagement.

**APPLIED WAYFINDING**
3rd floor, 22 Stukeley Street
London WC2B 4LR
T 020 7017 8488
C Richard Simon
E info@appliedwayfinding.com
W www.appliedwayfinding.com
Applied Wayfinding is an international design consultancy with expertise in designing legible systems for complex environments. Applied’s approach and methods have evolved from many years of experience in developing world-class wayfinding schemes for cities, campuses, parks, mixed uses developments and internal spaces.

**AREA**
Grange, Linnlthgow
West Lothian EH49 7RH
T 01506 843247
C Karen Cadell/ Julia Neil
E info@area.uk.com
W www.area.uk.com
Making places imaginatively to deliver the sustainable, successful and humane environments of the future.

**ASH SAKULA ARCHITECTS**
5 Hatton Wall, London, EC1N 8HX
T 020 7831 0195
C Cary Ash
E info@ashsak.com
W www.ashsak.com
Ash Sakula is an architectural partnership with projects spanning housing, mixed-use developments, cultural and educational buildings, masterplanning and urban design.

**ASSAEL ARCHITECTURE**
Studio 13, 50 Carnwath Road
London SW6 3FG
T 020 7736 7744
C Russell Pedley
E pedley@assael.co.uk
W www.assael.co.uk
Architects and urban designers covering mixed use, hotel, leisure and residential, including urban frameworks and masterplanning projects.

**ATKINS PLC**
Euston Tower, 286 Euston Road,
London NW1 2AT
T 020 7112 2000
C Paul Reynolds
E paul.reynolds@atkingglobal.com
W www.atkingglobal.co.uk
Interdisciplinary practice that offers a range of built environment specialists working together to deliver quality places for everybody to enjoy.

**BACA ARCHITECTS**
Unit 1, 159 Long Lane
London SE1 4PN
T 020 7337 5620
C Richard Coutts
E enquiries@baca.uk.com
W www.baca.uk.com
Award-winning architects with 100 per cent planning success. Baca Architects have established a core specialism in waterfront and water architecture.

**BARTON WILLMORE PARTNERSHIP**
**READING**
The Blade, Abbey Square
Reading RG1 1BE
T 0118 943 0000
C James de Havilland, Nick Sweet
W www.bartonwillmore.co.uk
Partnership with projects spanning mixed use, hotel, leisure and residential, including urban frameworks and masterplanning projects.

**BOYER PLANNING**
Crowthorne House, Nine Mile Ride
Wokingham, Berkshire RG40 3GZ
T 01344 753220
C Steve Punter
E steve.punter@boyerplanning.co.uk
W www.boyerplanning.co.uk
Offices in Wokingham, Colchester, Cardiff, Twickenham and London. Planning and urban design consultants offering a wide range of services to support sites throughout the development process: from appraisals to planning applications and appeals.

**BOYLE & SUMMERS**
Canute Chambers
Canute Road
Southampton S014 3AB
T 02380 63 1432 / 07824 698033
C Richard Summers
E richard@boylandsummers.com
W www.boylandsummers.co.uk
Space-shapers, place-makers, street designers and development promoters. Value generators, workers and site finders. Strategists, pragmatists, specialists and generalists. Visioneers, urbanists, architects and masterplanners.

**BUILDING DESIGN PARTNERSHIP**
16 Brewhouse Yard, Clerkenwell,
London EC1V 4LJ
T 020 7912 5000
C Andrew Tindsley
E andrew.tindsley@bdp.com
W www.bdp.co.uk
BDP offers town planning, Masterplanning, urban design, landscape, regeneration and sustainability studies, and has teams based in London, Manchester and Belfast.

**BUPD LTD**
154 Hurstfield Road, Macclesfield
Cheshire SK10 2QX
T 01625 262924
C Bob Phillips
E info@budp.co.uk
W www.budp.co.uk
A multi-disciplinary town planning and urban design consultancy dedicated to the delivery of high-quality development solutions working with public, private and community organisations.
METROPOLITAN WORKSHOP
14-16 Cowcross Street
London EC1M 6DG
T 020 7566 0450
C David Prichard/Neil Deeley
E info@metwork.co.uk
W www.metwork.co.uk
Metropolitan Workshop has experience in urban design, land use planning, regeneration and architecture in the UK, Eire and Norway. Recent projects: Ballymun Dublin, Durham Millennium Quarter, Adamstown District Centre Dublin, Bjørnkap Waterfront

MOUCHEL
209-215 Blackfriars Road
London SE1 9NL
T 020 7903 2600
C Ludovic Pittle
E Ludovic.Pittle@mouchel.com
W www.mouchel.com
Integrated urban design, transport and engineering consultancy, changing the urban landscape in a positive manner, creating places for sustainable living.

NASH PARTNERSHIP
23a Sydney Buildings
Bristol BS1 6BZ
T 0117 927 4442
C Donna Fooks-Bale
E dfooks-bale@nashpartnership.com
W www.nashpartnership.com
Nash Partnership is an architecture, planning, urban design, conservation and economic regeneration consultancy based in Bath and Bristol.

NATHANIEL LICHFIELD & PARTNERS LTD
14 Regent’s Wharf, All Saints Street, London EC1M 5BE
T 020 7837 4477
C Nick Thompson
E nthompson@lichfields.co.uk
W www.lichfields.co.uk
Also at Newcastle upon Tyne and Cardiff
Urban design, Masterplanning, heritage/conservation, visual appraisal, regeneration, daylight/sunlight assessments, public realm strategies.

NEW MASTERPLANNING LIMITED
2nd Floor, 107 Bournemouth Road, Poole, Dorset BH14 9HR
T 01202 742228
C Andy Wake
E office@newmasterplanning.com
W www.newmasterplanning.com
Our skills combine strategic planning with detailed implementation, design flair with economic rigour, independent thinking with a partnership approach.

NICHOLAS PEARSON ASSOCIATES
30 Brock Street, Bath BA1 2LN
T 01225 445548
C Simon Kale
E info@npaconsult.co.uk
W www.npaconsult.co.uk
Masterplanning, public realm design, streetscape analysis, concept and detail designs. Also full landscape architecture service, EA, green infrastructure, ecology and biodiversity, environmental planning and management.

NJB A + U
36 Upper Baggot Street
Dublin 4, IRE - D4, Ireland
T 00 353 1 679 8068
C Noel J Brady
E njba@eircom.net
W www.12publishers.com/njba.htm
Integrated landscapes, urban design, town centres and squares, strategic design and planning.

NODE URBAN DESIGN
33 Holmfield Road
Leicester LE1 2SE
T 0116 2709742
C Nigel Wakefield
E nwakefield@nodeurbandesign.com
W www.nodeurbandesign.com
An innovative team of urban design, landscape and heritage consultants who believe that good design adds value. Providing sustainable urban design and masterplan solutions at all scales of development with a focus on the creation of a sense of place.

NOVELL TULLETT
The Old Mess Room, Home Farm
Barrow Gurney BS4 3RW
T 01225 450174
C Simon Lindsey
E bristol@novelltullett.co.uk
W www.novelltullett.co.uk
Urban design, landscape architecture and environmental planning.

ORIGINS
Tyndall House
17 Whiteladies Road
Clifton, Bristol BS8 1PB
T 0117 957 3281
C Emily Esfahani
E eor@origins.co.uk
W www.origins.co.uk
Planning and urban design consultancy.

PAUL DREW DESIGN LTD
23-25 Great Sutton Street
London ECIV 0DN
T 020 7017 1785
C Paul Drew
E pdrew@pauldrewdesign.co.uk
W www.pauldrewdesign.co.uk
Masterplanning, urban design, residential and mixed use design. Creative use of design codes and other briefing material.

OVE ARUP & PARTNERS
Consulting West Team
63 St Thomas Street
Bristol BS1 6JZ
T 0117 9765432
C J Shore
E bristol@arup.com
W arup.com

PEGASUS GROUP
Pegasus House,
Querna Business Centre
Whitworth Road, Cirencester GL7 1RT
T 01285 641717
C Michael Carr
E mike.carr@pegasusgp.co.uk
W www.pegasusgp.co.uk
Masterplanning, detailed layout and architectural design, design and access statements, design codes, sustainable design, development briefs, development frameworks, expert witness, community involvement and sustainability appraisal. Part of the multidisciplinary Pegasus Group.

PHILIP CAVE ASSOCIATES
70 Cowcross Street, London EC1M 6EJ
T 020 7250 0977
C Philip Cave
E principal@philpicave.com
W www.philpicave.com
Design-led practice with innovative yet practical solutions to environmental opportunities in urban regeneration. Specialist expertise in landscape architecture.

PHIL JONES ASSOCIATES
Seven Houses, High Street
Longbidge, Birmingham B31 2UQ
T 0121 475 0334
C Nigel Millington
E nigel@philjonesassociates.co.uk
W www.philjonesassociates.co.uk
One of the UK’s leading independent transport specialists offering the expertise to deliver high quality, viable developments which are design-led and compliant with urban design best practice.

PLACE BY DESIGN
Unit C, Baptist Mills Court
Bristol BS5 6FJ
T 01173 517 0349
C Charlie Burrough
E info@placebydesign.co.uk
W placebydesign.co.uk

PLANT-IE LLP
2 Back Grafton Street
Altrincham, Cheshire WA14 1DY
T 0161 985 5851
C Peter Swift
E info@plant-ie.com
W www.plant-ie.com
Design practice specialising in the creation of places and shaping of communities. Our Urban Designers work at all scales from regeneration strategies and conceptual masterplans through to Design Codes – making environments, neighbourhoods and spaces for people to enjoy.

PLANNING DESIGN PRACTICE
4 Woburn House, Vernon Gate
Derby DE1 1UL
T 01332 247 371
C Scott O’Dee
E scott@planningdesign.co.uk
W www.planningdesign.co.uk
We are a multi-disciplinary practice offering services in planning, architecture and urban design who seek to create better places.

PLUS URBAN DESIGN LTD
Spaceworks, Benton Park Road
Newcastle upon Tyne NE7 7LX
T 0844 800 6660
C Richard Charge, Tony Wyatt
E richardcharge@plusud.co.uk
W www.plusud.co.uk
Specialist practice providing strategic masterplanning, urban design guidance, analysis, character assessment and independent design advisory expertise.

PM DEVEREX
200 Upper Richmond Road,
London SW15 2SH
T 020 8750 1000
C Julian Seward
E marketing@pmdeverex.com
W www.pmdoverex.com
Adding value through innovative, ambitious solutions in complex urban environments.

POD
95 Galgate, Barnard Castle
Co Durham DL12 8ES
T 01845 872 728
C Andy Dobly
E andy@goodbarnardcastle.co.uk
Masterplanning, site appraisal, layout and architectural design. Development frameworks, urban regeneration, design codes, briefs and design and access statements. Second office in Newcastle upon Tyne.

POLLARD THOMAS EDWARDS
ARCHITECTS
Dispeker Wharf, 35 Graham Street,
London N1 8JX
T 020 7738 7247
C Robin Saha-Choudhury
E robin.saha-choudhury@pte.co.uk
Masterplanners, urban designers, developers, architects, listed building and conservation area designers; specialising in inner city mixed use high density regeneration.

PROJECT CENTRE LTD
Level 4, West End House
Westgate, London W5 9YV
T 020 7421 8322
C David Moores
E info@projectcentre.co.uk
W www.projectcentre.co.uk
Landscape architecture, public realm design, urban regeneration, street lighting design, planning supervision, traffic and transportation, parking and highway design.

PRO VISION PLANNING & DESIGN
Grosvenor Ct, Winchester Rd
Ampfield, Winchester SO51 9BD
T 01794 266668
C James Cleary
E j.cleary@pvprojects.com
W pvprojects.com

PRP ARCHITECTS
10 Lindsey Street,
London E1A 9HP
T 020 7963 1200
C Andy von Bradsky
E lon.prp@prparchitects.co.uk
Architects, planners and landscape architects, specialising in housing, urban regeneration, health, education and leisure projects.

RANDALL THORP
Canada House, 2 Chesspit Street,
Manchester M1 5FW
T 0161 228 7721
C Pauline Randall
E mail@randallthorp.co.uk
W www.randallthorp.co.uk
Masterplanning for new developments and settlements, infrastructure design and urban renewal, design guides and design briefing, public participation.

RANDOM GREENWAY ARCHITECTS
Super Hall, Harestone Valley Road
Caterham Surrey CR3 6HY
T 01883 346 441
C R Green
E rg@randomgreenvanarchitects.co.uk
Architects, planning and urban design. New build, regeneration, rehabilitation and restoration.
URBAN DESIGN FUTURES
34/1 Henderson Row
Edinburgh EH3 5DN
T0131 557 8944
Celsy Richardson
Email: info@urbannedesignfutures.co.uk
Website: www.urbannedesignfutures.co.uk

URBAN DESIGN
An innovative urban design and landscape architecture practice. We combine creativity with understanding to shape development and produce designs that are considered, viable and inspiring, from strategies and frameworks, through masterplanning to detailed design.

URBAN INITIATIVES STUDIO
Exmouth House, 3-11 Pine Street
London EC1R 0JH
T0203 567 0716
CHugo Nowell
Email: info@urbaninitiativesstudio.co.uk
Website: www.urbaninitiativesstudio.co.uk

INNOVATIVE urban design, planning and landscape practice specialising in Masterplanning, new settlements, urban regeneration, town and village studies.

URBAN INNOVATIONS
1st Floor, Wellington Buildings, 2 Wellington Street, Belfast BT16 1HT
T028 9043 5060
CTony Stevens/ Agnes Brown
Email: info@urbaninnovations.co.uk
Website: www.urbaninnovations.co.uk

The partnership provides not only feasibility studies and assists in site assembly for complex projects but also full architectural services for major projects.

URBED (URBANISM ENVIRONMENT & DESIGN)
MANCHESTER
10 Little Lever Street, Manchester M1 1HR
T0161 200 5500
CJohn Sampson
Email: info@urbed.coop
Website: www.urbed.coop

LONDON
The Building Centre
26 Store Street, London WC1E 7BT
CNicholas Falk
T0207 861 6538
Email: info@urbened.com

Sustainable Urbanism, Masterplanning, Urban Design, Retrofitting, Consultation, Capacity Building, Research, Town Centres and Regeneration.

URBEN
33a Wadeson Street
London E2 3DR
T0203 005 4859
CElizabeth Reynolds
Email: info@urbenstudio.com
Website: www.urbenstudio.com

URS INFRASTRUCTURE & ENVIRONMENT
6-8 Greencoat Place
London SW1P 1PL
T020 7795 3137
CBen Castell
Email: ben.castell@scottwilson.com
Website: www.urSGlobal.com

Also at Birmingham, Leeds, Manchester and Plymouth
Urban design, planning, landscape, economic and architectural design expertise supported by comprehensive multidisciplinary services.

VINCENT AND GORBING LTD
Sterling Court, Norton Road, Stevenage, Hertfordshire SG1 2JY
T01438 316331
Crichard Lewis
Email: urban designers@vincent-goring.co.uk
Website: www.vincent-goring.co.uk

Masterplanning, design statements, character assessments, development briefs, residential layouts and urban capacity exercises.

WEI YANG & PARTNERS
4 Devonshire Street
London W1W 5DT
T020 3102 8565
CDr Wei Yang
Email: info@weiyangandpartners.co.uk
Website: www.weiyangandpartners.co.uk

Independent multi-disciplinary company driven by a commitment to shape more sustainable and liveable cities. Specialising in low-carbon city development strategies, sustainable large-scale new settlement master plans, urban regeneration, urban and public realm design, mixed-use urban complex design and community building strategies.

WESTON WILLIAMSON + PARTNERS
12 Valentine Place
London SE1 8QH
T0207 403 2865
CChris Williamson
Email: chris.williamson@westonwilliamson.com
Website: www.westonwilliamson.com

WEST WADDY ADP LLP
The Malthouse
60 East St. Helen Street
Abingdon, OX14 5EB
T01235 523139
CPhilip Waddy
Email: enquiries@westwaddy-adp.co.uk
Website: www.westwaddy-adp.co.uk

Experienced and multi-disciplinary team of urban designers, architects and town planners offering a full range of urban design services.

WESTON WILLIAMSON + PARTNERS
12 Valentine Place
London SE1 8QH
T020 7461 8877
CChris Williamson
Email: team@westonwilliamson.com
Website: www.westonwilliamson.com

Weston Williamson is an award winning architectural, urban design and masterplanning practice with a wide variety of projects in the UK and abroad.

WHITE CONSULTANTS
Enterprise House
127-135 Bute Street
Cardiff CF10 5LE
T029 2043 7841
CSimon White
Email: sw@whiteconsultants.co.uk
Website: www.whiteconsultants.co.uk

A holistic approach to urban regeneration, design guidance, public realm and open space strategies and town centre studies for the public, private and community sectors.

WYG PLANNING & ENVIRONMENT
100 St. John Street
London EC1M 4EH
T020 7250 7500
C Colin James
Email: colin.james@wgy.com
Website: www.wgy.com

Offices throughout the UK
Creative urban design and masterplanning with a contextual approach to place-making and a concern for environmental, social and economic sustainability.

EDUCATION INDEX

ANGLIA RUSKIN UNIVERSITY
Department of Engineering & Built Environment, Marconi Building
Rivermead Campus, Bishop Hall Lane
Chelmsford CM1 1SQ
T01245 683 3952
C Dr Delilé Odeleye
Email: delile.odeleye@anglia.ac.uk
Website: www.anglia.ac.uk

WYG Planning & Environment MSc in Urban Design, Post Grad Diploma or Certificate in Urban Design. The emphasis is on sustainable urban design and cultural approaches to place-shaping. The course is based upon key requirements in the ‘Recognised Practitioner in Urban Design’ designation. It can be taken full time (1 year) or part time (2 years).

CARDIFF UNIVERSITY
Welsh School of Architecture and School of City & Regional Planning
Glamorgan Building
King Edward VII Avenue
Cardiff CF10 3WA
T029 2087 5972/029 2087 5961
CAllison Duttoit, Marga Huma Bauza
Email: enquiries@cardiff.ac.uk
Website: www.cardiff.ac.uk/cplan/study/postgraduate/urban-design-ma

One year full-time and two year part-time MA in Urban Design.

EDINBURGH SCHOOL OF ARCHITECTURE AND LANDSCAPE ARCHITECTURE
ECA University of Edinburgh
Lauriston Place, Edinburgh EH3 9DF
T0131 651 5786
CDr Ola Uduku
Email: o.uduku@ed.ac.uk
Website: www.ed.ac.uk/studying/postgraduate/degrees

Jointly run with Heriot Watt University, this MSc in Urban Strategies and Design focuses on urban design practice and theory from a cultural, and socio-economic, case-study perspective. Engaging students in ‘live’ urban projects, as part of the programme’s ‘action research’ pedagogy, it also offers research expertise in African and Latin American urban design and planning processes.
Urban Design In Autumn 2016 – Issue 140

*your text here*
For once, more by chance than intention, this Endpiece is actually written on the theme of the issue. HP Sauce used to be made at Aston Cross in Birmingham. On the opposite corner stood Ansells brewery. The unique combined smell from these two buildings – malt, hops, vinegar and I don’t know what else (Cette sauce de haute qualité est un melange de fruits orientaux, d’épices et de vinaigre…. you may remember reading the HP Sauce bottle label) – was a distinctive example of olfactory placemaking, which I wrote about in UD108.

Both institutions migrated away years ago – Ansells to Allied Breweries in Burton, and HP Sauce to Heinz in the Netherlands, and Aston no longer has its distinctive smell. What was the dense inner-city social node of Aston Cross is now also devastated by highway building and faceless redevelopment. But the HP site was at least bought and redeveloped by another business dealing in exotic foodstuffs: East End Foods, a huge supplier of Indian food ingredients. The chairman of this family company, the genial Tony Deep Wouhra, told me that the location was quite deliberate, as he was conscious that HP was an iconic element in the urban landscape, and he wanted to reproduce its landmark quality by building there.

The huge cash-and-carry warehouse, with 1,000 solar panels on its roof, has a big cylindrical glazed volume on the corner, which is both its entrance hall and a vertical urban farm. On several levels, trays of plants, growing hydroponically in water enriched with nutrients, slowly rotate around the space on a sort of miniature fairground circuit, in a light, heat and humidity-regulated environment. It is intended as a demonstration installation, mainly for educational purposes, not for economic production.

But clearly this model of internal vertical farming is capable of being expanded on a big scale, at which economically viable food production in the city is possible. Wouhra is motivated by two imperatives. Firstly to source his products as close to home as possible, and secondly to ensure the products are pure. He employs an Indian agronomy firm, Jain Irrigation, to advise him. Not being an expert, I don’t know the limitations of what can be grown vertically. At East End Foods, they are growing stuff such as basil, chard, spinach, chervil, chives, dill, coriander, mint and parsley – all fairly small plants. The argument is that by growing vertically, productivity is increased. You can grow more plants per square metre than you can on a square metre of ground, and you can grow them faster. Growing times vary with species, but some are as short as three weeks.

Growing more in the city of what we eat in the city is clearly a good thing: reducing food miles, and increasing the freshness of food. But at the same time it occurs to me that there is a dystopian side to the future that I am imagining. What will be the environmental impact, and the energy impact, of enormous mechanised high-rise greenhouses? And conversely, will our patchworks of urban allotments survive, that contribute so much to the city in environmental and social terms? Will we continue to be as alienated from the sources of our food as we are at present?

There is a global question too, arising from Wouhra’s ‘import only what you cannot grow here’ ethic. If we can grow green cardamoms in Birmingham in a controlled environment, instead of importing them from Guatemala, what do Guatemalan peasants do for a living? I had a related thought last year, when after my heart operation I was expertly looked after by a Filipino nurse. I wondered, who is nursing the hospital patients in Manila?

Joe Holyoak, architect and urban designer
What other element brings such long lasting diverse benefits to urban space than established trees.

The key to success is below ground.

- The most innovative tree pit products in the industry!
- Supported by 25 years of research & expertise
- Enables successful urban tree planting and increased leaf canopy

GreenBlue Urban
Establishing the future urban landscape

01580 830 800
enquiries@greenblueurban.com
greenblue.com